

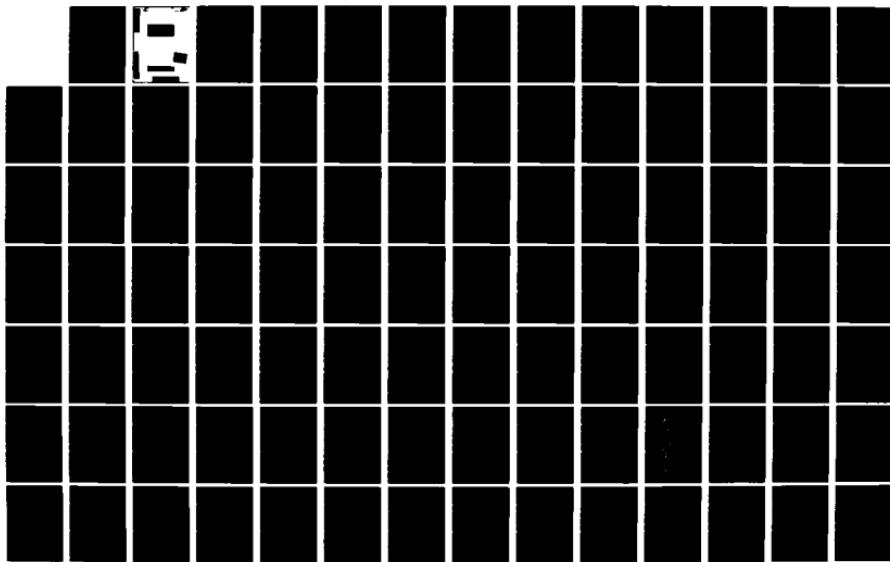
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VOLUME II APPENDICES. (U) INFORMATION SPECTRUM INC
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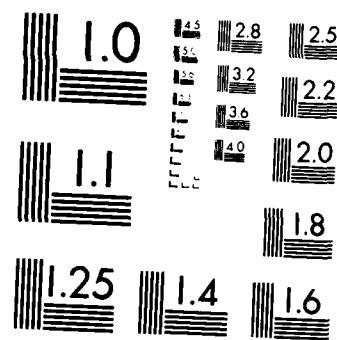
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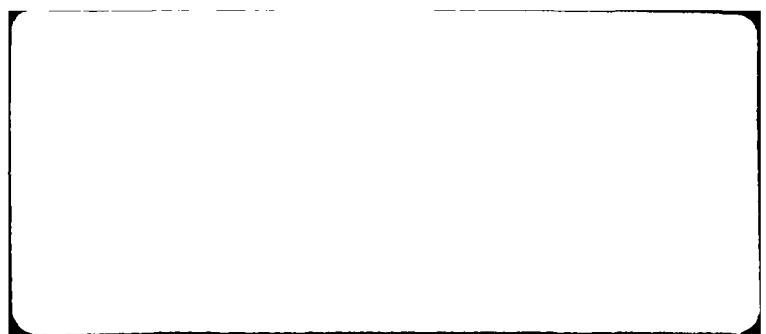
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FINAL REPORT
CIVILIAN MANNING OF
AE, AFS, AND AD TYPE SUPPORT SHIPS
VOLUME II

Contract No. D00014-79-C-0040
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VOLUME II
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**APPENDIX A
TAE-26 CIVILIAN MANNING
NECC-WATCH AND STATION BILL-PROPOSED MSC CREW**

NECC MANNING TAE-26 CLASS

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	2
Second Officer (W)	1
Third Officer (W)	<u>2</u>
Total Licensed	6

Unlicensed

Boatswain (D)	2
Carpenter (D)	1
Boatswain's Mate (D)	6
Able Seamen (W)	9
Able Seamen (D)	30
Ordinary Seamen (D)	<u>45</u>
Total Unlicensed	<u>93</u>
Total Deck Department	99

NECC MANNING TAE-26 CLASS

ENGINE DEPARTMENT

Licensed

Chief Engineer (D)	1
First Ass't Eng. (D)	1
Second Ass't Eng. (D)	2
Third Ass't Eng. (D)	2
Third Ass't Eng. (W)	<u>3</u>
Total Licensed	9

Unlicensed

Chief Electrician (D)	1
Second Electrician (D)	4
Refrigeration Eng. (D)	1
Second Refrigeration Eng. (D)	2
Deck Engineers (D)	4
Machinist/Plumbers (D)	2
Oilers (W)	3
Firemen/Water Tenders (W)	3
Wipers (D)	3
Utilitymen (D)	<u>4</u>
Total Unlicensed	<u>27</u>
Total Engine Department	36

NECC MANNING TAE-26 CLASS

STEWARDS DEPARTMENT

Chief Steward	1
Chief Cook	1
Cook/Baker	1
Cooks	3
Messmen	6
Utilitymen	12
Pantryman	1
Laundrymen	<u>2</u>
Total Stewards Department	27

PURSER/MEDICAL DEPARTMENT

Purser	1
Nurse	<u>1</u>
Total Purser Department	2

SUPPLY DEPARTMENT

Supply Officer	1
Ass't Supply Officer	1
Yeomen/Storekeepers	<u>3</u>
Total Supply Department	5
Total Ship Complement	<u>169</u>

NECC MANNING TAE-26 CLASS

MILDET

	03	W2	E7	E6	E5	E4	E3	=	TOTAL
Comm.	1			4	4	6	3	=	18
Ord.		1	1	2	4	6		=	14
Total Mildet	1	1	1	6	8	12	3	=	32

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
PILOT HOUSE	WATCH OFFICER TACTICAL/WATCH COORDINATOR COMMAND NAVIGATOR HELMSMAN TALKER (1 JV) TALKER (1 JG)	2ND/3RD OFF. 1ST OFF.	3RD OFF. 1ST OFF.	3RD OFF.
LOOKOUTS	FORWARD (RELIEF HELMSMAN) STARBOARD PORT AFT	AB	AB AB AB	AB
STEERING AFT	HELMSMAN REPAIRMAN	AB	ELECTRICIAN	
BRIDGE AREA	BRIDGE TO BRIDGE DISTANT LINE HANDLER/TAIKER BRIDGE TO BRIDGE DISTANT LINE HANDLER/TAIKER TAIKER (X 8.1)	UTILITYMAN(S) UTILITYMAN(S) UTILITYMAN(S) UTILITYMAN(S)	UTILITYMAN(S)	UTILITYMAN(S)

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
CARGO CONTROL	UNREP SUPERVISOR, DECK RIG SUPERVISOR STBD RIG SUPERVISOR PORT CARGO CONTROL OFFICER LOCATE/ ISSUE CLERK TALKER (X 8J)	1ST OFFICER BOSUN BOSUN SUPPLY OFFICER YEOMAN/STOREKEEPER OS		
REPLENISHMENT REPAIR PARTY	IN CHARGE MACHINERY REPAIRMAN MACHINERY REPAIRMAN ELECTRICAL REPAIRMAN ELECTRICAL REPAIRMAN INT. COMMUNICATION REPAIRMAN	3RD ENG. DECK MACH. DECK MACH. ELECTRICIAN ELECTRICIAN ELECTRICIAN		
CARGO RIG TEAM NO. 1	RIG CAPTAIN SIGNALMAN/SHIP TO SHIP PHONE TALKER	BOSUN'S MATE AB		
	LINE/CARGO HANDLER (X 8J) LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER WINCH OPERATOR (X 10J) WINCH OPERATOR (X 10J) WINCH CONTROLLER (X 10J)	AB AB OS OS OS AB AB AB		

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION			VERTREP
		STEAMING	UNREP		
CARGO RIG TEAM #2	RIG CAPTAIN SIGNALMAN/SHIP TO SHIP PHONE TALKER LINE/CARGO HANDLER (X 8J) LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER WINCH OPERATOR (X 10J) WINCH OPERATOR (X 10J) WINCH CONTROLLER (X 10J)	AB AB AB OS OS OS AB AB AB			BOSUN'S MATE
CARGO RIG TEAM #3	RIG CAPTAIN SIGNALMAN/SHIP TO SHIP PHONE TALKER LINE/CARGO HANDLER (X 8J) LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER LINE/CARGO HANDLER WINCH OPERATOR (X 10J) WINCH OPERATOR (X 10J) WINCH CONTROLLER (X 10J)	AB AB AB OS OS OS OS OS AB AB AB			BOSUN'S MATE

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION	
		STEAMING	UNREP
CARGO RIG TEAM #4	RIG CAPTAIN SIGNALMAN/SHIP TO SHIP TALKER	BOSUN'S MATE AB	
	LINE/CARGO HANDLER (X 8J)	AB	
	LINE/CARGO HANDLER	AB	
	LINE/CARGO HANDLER	OS	
	LINE/CARGO HANDLER	OS	
	LINE/CARGO HANDLER	OS	
	WINCH OPERATOR (X 10J)	AB	
	WINCH OPERATOR (X 10J)	AB	
	WINCH CONTROLLER (X 10J)	AB	
CARGO RIG TEAM #5	RIG CAPTAIN SIGNALMAN/SHIP TO SHIP TALKER	BOSUN'S MATE AB	
	LINE/CARGO HANDLER (X 8J)	AB	
	LINE/CARGO HANDLER	AB	
	LINE/CARGO HANDLER	OS	
	LINE/CARGO HANDLER	OS	
	LINE/CARGO HANDLER	OS	
	WINCH OPERATOR (X 10J)	AB	
	WINCH OPERATOR (X 10J)	AB	
	WINCH CONTROLLER (X 10J)	AB	

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
HOLD TEAM #1				
HOLD CAPTAIN	YEOMAN/STOREKEEPER			
AMMO HANDLER	AB			
AMMO HANDLER	OS			
FORKLIFT OPERATOR	OS			
FORKLIFT OPERATOR	OS			
ELEVATOR OPERATOR	OS			
ELEVATOR OPERATOR	OS			
HOLD TEAM #2				
HOLD CAPTAIN	YEOMAN/STOREKEEPER			
AMMO HANDLER	AB			
AMMO HANDLER	OS			
FORKLIFT OPERATOR	OS			
FORKLIFT OPERATOR	OS			
ELEVATOR OPERATOR	OS			
ELEVATOR OPERATOR	OS			
HOLD TEAM #3				
HOLD CAPTAIN	YEOMAN/STOREKEEPER			
AMMO HANDLER	AB			
AMMO HANDLER	OS			
FORKLIFT OPERATOR	OS			
FORKLIFT OPERATOR	OS			
ELEVATOR OPERATOR	OS			
ELEVATOR OPERATOR	OS			

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
HOLD TEAM #4	HOLD CAPTAIN AMMO HANDLER AMMO HANDLER FORKLIFT OPERATOR FORKLIFT OPERATOR ELEVATOR OPERATOR ELEVATOR OPERATOR	AB OS OS OS OS OS OS		YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER OS OS OS OS
STAGING TEAM	POIC POIC POIC POIC FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR			POIC POIC POIC POIC FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR FORKLIFT OPERATOR

HELICOPTER CONTROL TOWER

HELICOPTER CONTROL OFFICER
TALKER (1 JG)

MILDET
MILDET

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
VERTREP TEAM				
FLIGHT DECK SUPV.				BOSUN
LANDING SIGNAL DIRECTOR (1 JG)				MTJ,DEFT
SCENE LEADER				2ND/3RD OFF
TALKER (1 JG)				UTILITYMAN(S)
FORKLIFT OPERATOR				OS
FORKLIFT OPERATOR				OS
CARGO HANDLER/HOSEMAN				UTILITYMAN(S)
CARGO HANDLER/HOSEMAN				UTILITYMAN(S)
CARGO HANDLER/HOSEMAN				UTILITYMAN(S)
CARGO HANDLER/HOSEMAN				UTILITYMAN(S)
HOT SUITMAN				MILDET
HOT SUITMAN				MILDET
NOZZLEMAN				AB
NOZZLEMAN				AB
HOSEMAN				MESSMAN (S)
HOSEMAN				MESSMAN (S)
CO2 BOTTLE HANDLER				UTILITYMAN(E)
FOG FOAM GENERATOR OPER				UTILITYMAN(E)
MEDICAL TECHNICIAN (PORT)				PURSER
MEDICAL TECHNICIAN (STBD)				NURSE
REPLENISHMENT MEDICAL TEAM				
ENGINEER WATCH OFF.	2ND/3RD ENG			3RD ENG.
WATCH COORDINATOR				CHIEF ENG
UPPER LEVEL				UTILITYMAN(E)
THROTTLEMAN (1 JV)				1ST ENG
LOWER LEVEL				OILER
RECORDER/MESSINGER	OILER			WIPER
BOILER TENDER/CONSOLE		FW/T		2ND FMG.
OPERATOR				F/WT
BURNERMAN/CHECKMAN				F/WT
SWITCHBOARD/GENERATOR OPER.				ELECTRICIAN

NECC WATCH & STATION BILL
TAE-26 CLASS

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
EMERGENCY GENERATOR #1	DIESEL/SWITCHBOARD OPER. (JV)			ELECTRICIAN
EMERGENCY GENERATOR #2	DIESEL/SWITCHBOARD OPER. (1 JV)			ELECTRICIAN
DAMAGE CONTROL CENTER	DAMAGE CONTROL SUPV. DAMAGE CONTROL ASST (1 JV)			CARPENTER PLUMBER/ MACH

CIVIL SERVICE/MILDET MANNING
USNS KILAUEA (TAE-26)

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	2
Second Officer (W)	1
Third Officer (W)	<u>2</u>
Total Licensed	6

Unlicensed

Boatswain (D)	2
Carpenter (D)	1
Boatswain's Mate (D)	5
Able Seamen (W)	9
Able Seamen (Maint.)	24
Ordinary Seamen (D)	<u>3</u>
Total Unlicensed	<u>44</u>
Total Deck Department	50

CIVIL SERVICE/MILDET MANNING
USNS KILAUEA (TAE-26)

ENGINE DEPARTMENT

Licensed

Chief Engineer (D)	1
First Ass't Eng. (D)	1
Second Ass't Eng. (D)	2
Third Ass't Eng. (W)	<u>3</u>

Total Licensed 7

Unlicensed

Chief Electrician (D)	1
Refrigeration Eng. (D)	2
Deck Eng. - Machinist (D)	3
Unlicensed Jr. Engineer (D)	4
2nd Electrician (D)	4
Engine Utilityman	3
Oiler (W)	3
Fireman/Water Tender (W)	3
Wiper (D)	<u>4</u>

Total Unlicensed 27

Total Engine Department 34

CIVIL SERVICE/MILDET MANNING
USNS KILAUEA (TAE-26)

STEWARDS DEPARTMENT

Chief Steward	1
Third Steward	1
Chief Cook	1
Night Cook & Baker	1
2nd Cook/Baker	2
Ass't Cook	2
Third Pantryman	2
Laundryman	2
Messman	7
Utilityman	<u>12</u>

Total Stewards Department 31

PURSER/MEDICAL DEPARTMENT

Purser	1
Jr. Purser	1
Nurse	<u>1</u>

Total Purser Department 3

SUPPLY DEPARTMENT

Supply Officer	1
Yeomen/Storekeepers	<u>2</u>

Total Supply Department
Total Ship Complement

3
121

CIVIL SERVICE/MILDET MANNING
USNS KILAUEA (TAE-26)

MILDET

	O3	W2	E7	E6	E5	E4	E3	TOTAL
Communications	1		1	3	8	5	-	18
Ordinance	1	1	1	2	2	6	-	13
Operations				1	2		-	3
Security						1	-	1
Supply				1			-	1
Admin.				1	1		-	2
	2	1	2	8	13	11	1	38

**APPENDIX B
TAFS-1 CIVILIAN MANNING
NECC-WATCH AND STATION BILL-PROPOSED MSC CREW**

NECC MANNING TAFS-1 CLASS

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	2
Second Officer (W)	1
Third Officer (W)	<u>2</u>

Total Licensed	6
----------------	---

Unlicensed

Boatswain (D)	2
Carpenter (D)	1
Boatswain's Mate (D)	6
Able Seamen (W)	9
Able Seamen (D)	28
Ordinary Seamen (D)	<u>41</u>

Total Unlicensed	<u>87</u>
------------------	-----------

Total Deck Department	93
-----------------------	----

NECC MANNING TAFS-1 CLASS

ENGINE DEPARTMENT

Licensed

Chief Engineer (D)	1
First Ass't Eng. (D)	1
Second Ass't Eng. (D)	2
Third Ass't Eng. (D)	2
Third Ass't Eng. (W)	<u>3</u>
Total Licensed	9

Unlicensed

Deck Engineer (D)	4
Chief Electrician (D)	1
Second Electricians (D)	2
Refrigeration Engineer (W)	1
2nd Refrigeration Engineer(W)	1
3rd Refrigeration Engineer(W)	1
Refrigeration Oilers (W)	3
Machinist (D)	1
Utilitymen (D)	3
Oilers (W)	3
Firemen/Water Tender (W)	3
Wiper (D)	<u>3</u>

Total Unlicensed

26

Total Engine Department

35

NECC MANNING TAFS-1 CLASS

STEWARDS DEPARTMENT

Chief Steward	1
Chief Cook	1
Cook/Baker	2
Third Cook	1
Utilitymen	12
Messman	6
Third Pantryman	1
Laundryman	1
Ass't Laundryman	1
Total Stewards Department	26

PURSER/MEDICAL DEPARTMENT

Purser	1
Nurse	1
Total Purser Department	2

SUPPLY DEPARTMENT

Supply Officer	1
Ass't Supply Officer	1
Yeomen/Storekeepers	<u>25</u>
Total Supply Department	27
Total Ship Complement	<u>183</u>

NECC MANNING TAFS-1 CLASS

MILDET

	04	03	02	E8	E6	E5	E4	E3	TOTAL
Communications		1			4	4	6		= 18

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION			VERTREP
		STEAMING	UNREP		
PILOT HOUSE	WATCH OFFICER TACTICAL/WATCH COORDINATOR	2ND/3RD OFF. 1ST OFF.	3RD OFF. 1ST OFF.	2ND/3RD OFF.	
	COMMAND	MASTER 2ND OFF. AB	MASTER	MASTER	
	NAVIGATOR	AB	AB	AB	
	HELMSMAN		UTILITYMAN(S)	UTILITYMAN(S)	
	TALKER (1 JV)			UTILITYMAN(S)	
	TALKER (1 JG)			UTILITYMAN(S)	
LOOKOUTS	FORWARD (RELIEF HELMSMAN)	AB	AB	AB	
	STBD		AB	AB	
	PORT		AB	AB	
	AFT		AB	AB	
	HELMSMAN REPAIRMAN		AB	ELECTRICIAN	
STEERING AFT				UTILITYMAN(S)	
BRIDGE AREA	BRIDGE TO BRIDGE DISTANT LINE HANDLER			UTILITYMAN(S)	
	TALKER			UTILITYMAN(S)	
	BRIDGE TO BRIDGE DISTANT LINE HANDLER			UTILITYMAN(S)	
	TALKER			UTILITYMAN(S)	
	TALKER (X8J)			UTILITYMAN(S)	
	TALKER (1 JG)			UTILITYMAN(S)	

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION		WATCH STATION		CONDITION	
CARGO	CONTROL	CARGO	CONTROL	OFFICER	SUPPLY OFFICER
				STEAMING	UNREP
		TALKER (X10J)		UTILITYMAN(S)	VERTREP
		RIG SUPERVISOR FWD		BOSUN	
		RIG SUPERVISOR AFT		BOSUN	
		UNREP SUPERVISOR, DECK		1ST OFFICER	
		MAIL/MOVIE TRANSFER		BOSUN'S MATE	
REPLENISHMENT REPAIR PARTY		3RD ENG.			
		MACHINERY REPAIRMAN		DECK MACH.	
		MACHINERY REPAIRMAN		DECK MACH.	
		ELECTRICAL REPAIRMAN		ELECTRICIAN	
		ELECTRICAL REPAIRMAN		ELECTRICIAN	
		I.C. REPAIRMAN		ELECTRICIAN	
CARGO RIG TEAM NO. 1		BOSUN'S MATE			
		SIGNALMAN/TALKER-SHIP TO SHIP		AB	
		LINES/CARGO HANDLER		AB	
		LINES/CARGO HANDLER		OS	
		LINES/CARGO HANDLER		OS	
		LINES/CARGO HANDLER		OS	
		WINCH OPERATOR (X 10J)		AB	
		WINCH OPERATOR (X 10J)		AB	
		WINCH CONTROLLER (X 10J)		AB	

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
CARGO RIG TEAM No. 2	RIG CAPTAIN SIGNALMAN/TALKER-SHIP TO SHIP LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER WINCH OPERATOR (X 10J) WINCH OPERATOR (X 10J) WINCH CONTROLLER (X 10J)	AB AB OS OS OS AB AB AB		BOSUN'S MATE
CARGO RIG TEAM No. 3	RIG CAPTAIN SIGNALMAN/TALKER-SHIP TO SHIP LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER LINES/CARGO HANDLER WINCH OPERATOR (X 10J) WINCH OPERATOR (X 10J) WINCH CONTROLLER (X 10J)	AB AB OS OS OS AB AB AB		BOSUN'S MATE

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
CARGO RIG TEAM NO. 4				
RIG CAPTAIN	SIGNALMAN/TALKER-SHIP			BOSUN'S MATE
TO SHIP		AB		AB
LINES/CARGO HANDLER		AB		
LINES/CARGO HANDLER		OS		
LINES/CARGO HANDLER		OS		
LINES/CARGO HANDLER		OS		
WINCH OPERATOR (X 10J)		AB		
WINCH OPERATOR (X 10J)		AB		
WINCH CONTROLLER (X 10J)		AB		
CARGO RIG TEAM NO. 5				
RIG CAPTAIN	SIGNALMAN/TALKER-SHIP			BOSUN'S MATE
TO SHIP		AB		AB
LINES/CARGO HANDLER		AB		
LINES/CARGO HANDLER		OS		
LINES/CARGO HANDLER		OS		
LINES/CARGO HANDLER		OS		
WINCH OPERATOR (X 10J)		AB		
WINCH OPERATOR (X 10J)		AB		
WINCH CONTROLLER (X 10J)		AB		

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
HOLD TEAM NO. 1	HOLD CAPTAIN SECURITY CARGO ISSUE CONVEYOR OPER/CHECKER CONVEYOR OPER/CHECKER	YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER		
HOLD TEAM NO. 2	HOLD CAPTAIN FORKLIFT OPER/CHECKER FORKLIFT OPER/CHECKER FORKLIFT OPER/CHECKER FORKLIFT OPER/CHECKER FLAMMABLE CARGO ISSUE/ CONVEYOR OPER.	YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER		
STAGING TEAM HOLD NO. 1 & NO. 2	CARGO CONTROL SUPERVISOR FORKLIFT OPERATOR FORKLIFT OPERATOR	YEOMAN/STOREKEEPER OS OS		
HOLD TEAM NO. 3	HOLD CAPTAIN FORKLIFT OPERATOR FORKLIFT OPERATOR CONVEYOR OPERATOR CONVEYOR OPERATOR CARGO HANDLER CARGO HANDLER	YEOMAN/STOREKEEPER OS OS OS OS OS		
STAGING TEAM HOLD NO. 3	FORKLIFT OPERATOR FORKLIFT OPERATOR	OS OS		

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
HOLD TEAM NO. 4	HOLD CAPTAIN SECURITY CARGO ISSUE CONVEYOR OPER/ CHECKER CONVEYOR OPER/ CHECKER CONVEYOR OPER/ CHECKER FORKLIFT OPER/ CHECKER FORKLIFT OPER/ CHECKER	YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER		
HOLD TEAM NO. 5	HOLD CAPTAIN SECURITY CARGO ISSUE CONVEYOR OPER/ CHECKER CONVEYOR OPER/ CHECKER	YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER YEOMAN/STOREKEEPER		
STAGING TEAM HOLD NO. 4 & NO. 5	CARGO CONTROL SUPERVISOR FORKLIFT OPERATOR FORKLIFT OPERATOR	OS OS		YEOMAN/STOREKEEPER OS OS
VERTREP CARGO TEAM	VERTREP CARGO CONTROLLER ELEVATOR OPERATOR (X 23J) ELEVATOR OPERATOR (X 23J) FORKLIFT OPERATOR FORKLIFT OPERATOR CARGO HANDLER CARGO HANDLER CARGO HANDLER		OS OS OS OS OS OS OS OS	ASS'T SUPPLY OFFICER

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		VERTREP
		STEAMING	UNREP	
VERTREP CARGO TEAM (CONT.)				
CARGO HANDLER				YEOMAN/STOREKEEPER
CARGO HANDLER				YEOMAN/STOREKEEPER
CARGO HANDLER			OS	OS
CARGO HANDLER			OS	OS
CARGO HANDLER			OS	OS
TALKER (X 10J)				UTILITYMAN(S)
VERTREP TEAM				
HELICOPTER CONTROL				MILDET
OFFICER				MILDET
LANDING SIGNAL CONTROLLER				2ND/3RD OFF.
SCENE LEADER			OS	OS
CARGO HANDLER				MESSMAN(E)
CARGO HANDLER				MESSMAN (E)
TALKER (X 10J)				MILDET
TALKER (X 23J)				MILDET
TALKER (1 JG)				MILDET
HOTSUITMAN				MILDET
HOTSUITMAN				AB
NOZZLEMAN				AB
NOZZLEMAN				AB
HOSEMAN				OS
HOSEMAN				OS
CO2 BOTTLE HANDLER				AB
FOG FOAM GENERATOR OPERATOR				AB
REPLENISHMENT MEDICAL TEAM		MEDICAL TECHNICIAN (PORT)		PURSER
		MEDICAL TECHNICIAN (STBD)		NURSE

NECC WATCH & STATION BILL
TAFS-1

STATION IDENTIFICATION	WATCH STATION	CONDITION		
		STEAMING	UNREP	VERTREP
ENGINE CONTROL	WATCH OFFICER	3RD/2ND ENG.	3RD ENG.	3RD ENG.
	THROTTLEMAN (1 JV) WATCH COORDINATOR BOILER CONSOLE OPERATOR F/WT SWITCHBOARD OPERATOR (5 JV)		FIRST ENG. CHIEF ENG. 2ND ENG. ELECTRICIAN	F/WT
MACHINERY ROOM	UPPER LEVEL LOWER LEVEL CHECKMAN BURNERMAN PUMP OPERATOR	OILER	UTILITYMAN OILER F/WT F/WT WIPER	OILER F/WT F/WT
EMERGENCY DIESEL ROOM	OPERATOR		ELECTRICIAN	
DAMAGE CONTROL CENTER	SUPERVISOR		CARPENTER	

CIVIL SERVICE/MILDET MANNING TAFS-1 CLASS

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	2
Second Officer (W)	1
Third Officer (W)	<u>2</u>
Total Licensed	6

Unlicensed

Boatswain (D)	2
Carpenter (D)	2
Boatswain Mates (D)	6
Able Seamen (W)	6
Able Seamen (Maint.)	30
Ordinary Seamen (D)	<u>3</u>
Total Unlicensed	<u>49</u>

Total Deck Department **55**

CIVIL SERVICE/MILDET MANNING TAFS-1 CLASS

ENGINE DEPARTMENT

Licensed

Chief Engineer	1
First Ass't Eng. (D)	1
Second Ass't Eng. (W)	1
Third Ass't Eng. (W)	2
Third Ass't Eng. (D)	<u>1</u>
 Total Licensed	6

Unlicensed

Deck Engineer (D)	2
Unlicensed Jr. Eng. (W)	3
Electrician (D)	1
Refrigeration Eng. (D)	3
Machinist (D)	1
Yeoman/Storekeeper (D)	1
2nd Electrician (D)	2
Engine Utilityman (D)	3
Oiler (W)	3
Refrigeration Oiler (W)	3
Fireman/Water Tender (W)	3
Wiper (D)	<u>3</u>
 Total Unlicensed	<u>28</u>
 Total Engine Department	34

CIVIL SERVICE/MILDET MANNING TAFS-1 CLASS

STEWARDS DEPARTMENT

Chief Steward	1
Third Steward	1
Chief Cook	1
Cook/Baker	2
Third Cook	1
Messman	6
Utilityman	12
Third Pantryman	1
Laundryman	1
Ass't Laundryman	<u>1</u>
Total Stewards Department	27

PURSER/MEDICAL DEPARTMENT

Purser	1
Nurse	<u>1</u>
Total Purser Department	2

SUPPLY DEPARTMENT

Supply Officer	1
Ass't Supply Officer	1
Yeomen/Storekeepers	<u>5</u>
Total Supply Department	7
Total Ship Complement	125

CIVIL SERVICE/MILDET MANNING TAFS-1 CLASS

MILDET

	05	03	02	E7	E6	E5	E4	E3	TOTAL
Communications			1		1	3	5	10	= 20
Supply	1	2	1		1	5	4	4	= 18
	1	3	1		2	8	9	10	= 38

APPENDIX C
TAD-37 CIVILIAN MANNING-OPERATING CREW
NECC-WATCH AND STATION BILL-PROPOSED MSC CREW

NECC MANNING TAE-37 CLASS

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	1
Second Officer (W)	1
Third Officer (W)	<u>2</u>
Total Licensed	5

Unlicensed

Boatswain (D)	1
Carpenter (D)	1
Boatswain's Mate (D)	1
Able Seamen (W)	6
Able Seamen (D)	13
Ordinary Seamen (D)	3
Yeoman/Storekeeper	<u>1</u>

Total Unlicensed

26

Total Deck Department

31

NECC MANNING TAD-37 CLASS

ENGINE DEPARTMENT

Licensed

Chief Engineer (D)	1
First Ass't Eng. (D)	1
Second Ass't Eng. (D)	1
Third Ass't Eng. (D)	1
Third Ass't Eng. (W)	<u>3</u>

Total Licensed

7

Unlicensed

Electrician (D)	1
Second Electrician (D)	3
Jr. Engineers (D)	2
Refrigeration Engineer (D)	1
Plumber/Machinist (D)	1
Oilers (W)	3
Oilers (Evaporators) (W)	3
Firemen/Watertender (W)	3
Wipers (D)	3
Utilitymen (D)	<u>6</u>

Total Unlicensed

26

Total Engine Department

33

NECC MANNING TAD-37 CLASS

STEWARDS DEPARTMENT

Chief Steward	1
Second Steward	1
Third Steward	3
Chief Cook	1
Cook/Baker	4
Second Cook	4
Third Cook	6
Messmen	22
Utilitymen	50
Laundryman Foreman	1
Laundryman	1
Ass't Laundryman	4
Yeoman/Storekeeper	1
Total Stewards Department	99

PURSER DEPARTMENT

Purser	1
Jr. Purser	1
Total Purser Department	2

Total Civilian Crew	165
----------------------------	------------

NECC MANNING TAD-37 CLASS

MILDET

	05	04	03	W2	E8	E7	E6	E5	E4	E3	TOTAL
Communications			1				4	4	6	3	= 18
Medical		1	2		1		2	2	4	3	= 15
Dental	1	1	2				1	1	1	2	= 9
Ordinance				1	1	1	3	4	4		= 14
	1	2	6	1	1	1	10	11	15	8	56

NECC WATCH & STATION BILL
TAD-37

STATION IDENTIFICATION	WATCH STATION	STEAMING	IMPORT
PILOT HOUSE	COMMAND WATCH OFFICER HELMSMAN NAVIGATOR	MASTER 2ND/3RD OFF. AB 2ND OFF.	2ND/3RD OFF. (NOTE 1)
LOOKOUTS	FORWARD-RELIEF HELMSMAN	AB	
STEERING AFT (RESTRICTED WATERS)	HELMSMAN REPAIRMAN	AB ELECTRICIAN	
ENGINE ROOM	WATCH OFFICER THROTTLEMAN LOWER LEVEL	3RD/2ND ENG. WATCH OFF. OILER	3RD/2ND ENG. (NOTE 1) OILER
	BOILER CONTROL	F/WT	F/WT
	OPERATOR	OILER	OILER
DIESEL GEN. ROC.: (RESTRICTED WATERS)	OPERATOR	ELECTRICIAN	

NOTE 1 These licensed officers are assigned a day or night duty supervisor's watch when the ship is not steaming.

CIVIL SERVICE/MILDET MANNING TAD-37

DECK DEPARTMENT

Licensed

Master	1
First Officer (D)	1
Second Officer (W)	1
Third Officer (W)	<u>2</u>
Total Licensed	5

Unlicensed

Boatswain (D)	1
Carpenter (D)	1
Yeoman/Storekeeper (D)	1
Able Seaman (W)	6
Able Seaman (Maint.) (D)	9
Ordinary Seaman (D)	<u>3</u>

Total Unlicensed

21

Total Deck Department

26

CIVIL SERVICE/MILDET MANNING TAD-37

ENGINE DEPARTMENT

Licensed

Chief Engineer	1
First Ass't Eng. (D)	1
Second Ass't Eng. (W)	1
Third Ass't Eng. (W)	2
Licensed Jr. Eng. (D)	<u>2</u>
 Total Licensed	7

Unlicensed

Electrician	1
Refrigeration Eng. (D)	1
Plumber/Machinist (D)	2
Yeoman/Storekeeper (D)	1
2nd Electrician (D)	2
Engine Utilityman (D)	2
Oiler (W)	3
Fireman/Water Tender (W)	3
Wiper (D)	<u>4</u>

Total Unlicensed

19

Total Engine Department

26

CIVIL SERVICE/MILDET MANNING TAD-37

STEWARDS DEPARTMENT

Chief Steward	1
Second Steward	1
Third Steward	3
Chief Cook	1
Yeoman/Storekeeper	1
Cook/Baker	4
Second Cook	4
Third Cook	6
Messman	22
Utilityman	<u>50</u>

Total Stewards Department 93

PURSER DEPARTMENT

Purser	1
Jr. Purser	<u>1</u>

Total Purser Department 2

Total MSC Manning 147

BOAT AUGMENTATION

Unlicensed Eng.	2
Engine Utilityman	2
2nd Electrician	1
Boatswain Mate	1
Able Seaman	<u>4</u>

Total Boat Augmentation 10
Total MSC Manning (Augmented) 157

CIVIL SERVICE/MILDET MANNING TAD-37

MILDET

	05	04	03	W2	E8	E7	E6	E5	E4	E3	TOTAL
Communications				1			4	4	6	3	= 18
Medical			1	2		1		2	2	4	3 = 15
Dental	1	1	2				1	1	1	2	= 9
Ordinance				1	1	1	3	4	4		= 14
	1	2	6	1	1	1	10	11	15	8	56

APPENDIX D
NOTIONAL MODIFIED CREWING CONCEPT-
SUPPORTING DOCUMENTATION

JOINT POLICY DECLARATION BY SEAFARERS INTERNATIONAL UNION OF
NORTH AMERICA, ATLANTIC, GULF, LAKES AND INLAND WATERS DISTRICT,
DISTRICT 2, MEBA, AND AMERICAN MARITIME OFFICERS

Recognizing the serious economic problems confronting the American Merchant Marine with consequential adverse effects upon merchant seamen employment opportunities,

Further recognizing that an American Merchant Marine manned and adequately protected with a pool of highly trained skilled seamen, possessed of modern technological expertise and its application, is most crucial to our national security and defense.

Mindful that certain economic interests both foreign and domestic have and are creating substantial damage to an American national resource, our merchant marine, through various artifices and highly questionable devices and,

Cognizant that governmental authorities responsible by oath of office, have nevertheless unfortunately, if not negligently, failed to give appropriate priority to the preservation of our maritime industry, and irreplaceable national resource.

Faced with this crisis and equally aware that certain employer maritime interests share our concerns and are prepared as we are under appropriate circumstances to attempt to remedy this present intolerable state of affairs of the American Merchant Marine,

The undersigned unions therefore, to foster the imperative needs for a resurgence of the American Merchant Marine and acting in unison are prepared and shall implement with their respective membership concurrence, as to each vessel addition to our maritime industry the following:

1. Joint contracts for such vessels' entire complement in accordance with applicable law, to the end of obtaining uniformity in collective bargaining agreements with resulting beneficial labor relations administration, cost efficiency and negating jurisdictional disputes and rivalry.
2. Interrelation of training and upgrading programs so as to obtain with cost efficiency, seamen licensed and unlicensed, possessed of the skills and knowledge to implement with expertise, present and future maritime technology and thus to realize maximum efficiency with sound fiscal effectiveness.
3. Provide for interrelation, through reciprocal and like agreements, multiple beneficial funds to enable the employment and retention of skilled personnel by affording them the opportunity to preserve the continuity of their employment service and to be employed wherever qualified to work aboard the vessel.
4. Provide for complement manning efficiency consistent with the health, welfare and safety of the crew, the seaworthy maintenance of the vessel and applicable legal requirements.
5. Provide for coordinated legislative and political efforts in the manner legally prescribed, to the end of fostering the welfare of the American Merchant Marine and the support of elected officials and persons who recognize the critical importance of our industry as an economic and national defense resource.
6. Confer and consult regularly with our nation's military officials, charged with the responsibility for the administration of our Armed Forces, particularly the American Merchant Marine

as an auxiliary thereto, and thus make available appropriate input as to our civilian skilled employment resource pool and its deployment.

SEAFARERS INTERNATIONAL UNION OF NORTH AMERICA, ATLANTIC, GULF AND INLAND WATERS DISTRICT BY:

Frank W. Dugay

DISTRICT 2, MEBA-AMO BY:

Raymond M. May Pres.

Dated: March 30, 1982

**APPENDIX E
AD-37 CONVERSION-
M. ROSENBLATT & SON, INC.**

AD 37 CONVERSION

May 5, 1982

PREPARED BY:

M. ROSENBLATT & SON, INC.
ARLINGTON, VIRGINIA

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20	Crew Laundry - 2nd Deck	29
21	Lau, Barber Shop, Phys. Fitness Fac. - 4th Deck	30
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1.0

INTRODUCTION

The AD 37 is a destroyer tender with accommodations for 120 officers, 183 CPO's, and 1490 crew. Accommodations are also provided for 5 flag officers and 9 transient officers.

This report discusses the conversion of the AD 37 to a civilian operated ship relative to the following spaces:

- a. Officers quarters, sanitary spaces, and lounge facilities
- b. Chief Petty Officer (CPO) living spaces, sanitary spaces, and lounge facilities
- c. Crew living, sanitary, and recreation spaces
- d. Food service and messing facilities
- e. Laundry and drycleaning facilities
- f. Medical and dental facilities
- g. Barber Shop
- h. Ship Store
- i. Physical fitness facility

In order to accommodate the ship operators in accordance with MSC requirements, certain compartments were removed from the ship. A list of these compartments is provided in Appendix A.

Section 2.0 identifies general operations and habitability design requirements. The design approach is outlined in Section 3.0. Specific facility requirements and design solutions are presented in Section 4.0 for the spaces delineated above.

The estimated cost for this conversion is provided in Appendix B.

2.0 DESIGN REQUIREMENTS

This section summarizes the conversion design requirements for human support facilities in terms of operations and accommodations.

2.1 OPERATIONAL REQUIREMENTS

Two categories of civilian personnel and military detachment are to be provided accommodations. The basic requirements for accommodating these personnel are as follows:

- a. Ship Operators: These civilians are to be provided with accommodations in accordance with the accommodation standards for ex-navy vessels, COMSCINST 9330.6C of 30 April 1981.
- b. Support Personnel: Under normal operations, these civilians will be accommodated off the ship. In an emergency, when support personnel must deploy with the ship, they are to be quartered in existing accommodations.
- c. Navy Detachments: Navy personnel will be assigned to operate the ships communications systems, provide medical and dental care, and maintain ordnance security, and will be quartered in existing accommodations. Space did not permit accommodating the permanently embarked military detachment in accommodations equal to those provided for ship operators as required by COMSCINST 9330.6C.

2.2 ACCOMMODATIONS

The prescribed number and distribution of accommodations is shown in Tables 1 and 2.

Table I
CIVILIAN PERSONNEL ACCOMMODATIONS

Categories of Personnel	Number of Accommodations		
	OFFICERS	CPO	CREW
Ship operators	18	4	138
Support crew	19	118	977
Totals - Civilian Personnel	37	122	1115

Table 2
NAVY PERSONNEL ACCOMMODATIONS

	Number of Accommodations		
	OFFICERS	CPO	CREW
Communications	1	1	24
Medical/Dental	6	2	20
Ordnance Security	2	1	11
Totals - Navy Personnel	9	4	55

2.3 STANDARDS

Quarters for ship personnel shall be in accordance with COMSCINST 9330.6C of 30 April 1981. Support personnel and the Navy detachment are quartered in existing accommodations. (The existing accommodations were designed to OPNAVINST 9330.5 habitability standards).

3.0 DESIGN APPROACH

The design approach included two basic steps:

- a. Identify Requirements: The standards mentioned in Section 2.0 were examined and all applicable requirements for each space were identified.
- b. Validate Solutions: Proposed solutions were reviewed by design personnel having cognizance. Inputs from these sources were incorporated into the final solutions. This design effort verified that the solutions presented herein can be obtained within the area allocated for habitability in the AD 37 Booklet of General Plans, AD 37-845-1905504, dated 28 September 1967, Rev. 6, dated 12 February 1980.

4.0 DESIGN SOLUTIONS

This section provides the design solutions covering each space. The requirements are stated and the source of each requirement is identified. Each design solution is then explained and further illustrated by a drawing.

4.1.1 Requirements for Ship Operators (MSC)

4.1.1.1 Master and Chief Engineer

- a. Provide stateroom with an air port and sanitary and office facilities.
- b. Gross area in stateroom: 200 sq. ft.
- c. Gross area in office: 275 sq. ft.
- d. Provide a private bath.

4.1.1.2 First Officer, First Assistant Engineer, Purser, and Chief Steward

- a. Provide stateroom with an air port and sanitary and office facilities.
- b. Provide private bath
- c. Gross area in stateroom: 140 sq. ft.
- d. Gross area in office: 165 sq. ft.

4.1.1.3 Junior Officers

Accommodate 12 junior officers (including 4 spares) by providing for each:

- a. Single stateroom with an air port and private sanitary facilities.
- b. Gross area in stateroom and bath: 130 sq. ft.

4.1.2 Requirements for Support Personnel (Ground Rules)

4.1.2.1 Department Heads

Accommodate 3 department heads by providing for each:

- a. Department head accommodations with lavatory facility.
- b. Community toilet and shower facilities.

4.1.2.2 Junior Officers

Accommodate 16 junior officers by providing:

- a. Double stateroom accommodations with lavatory facility.
- b. Community toilet and shower facilities.

4.1.3 Requirements for Navy Personnel (Ground Rules)

4.1.3.1 Department Heads

Accommodate 3 department heads by providing for each:

- a. Department head accommodations with lavatory facility.
- b. Community toilet and shower facilities.

4.1.3.2 Junior Officers

Accommodate 6 junior officers by providing:

- a. Double stateroom accommodations with lavatory facility.
- b. Community toilet and shower facilities.

4.1.4 Design Solution

Space allocations within the superstructure permit quartering all of the officers on the 01, 02 and 03 levels, Figures 1, 2 and 3. The officers quarters were arranged so that each ship officer was provided with a fixed light in his stateroom. Air ports are not provided because the fixed lights already exist. The staterooms and offices for ship operators are outfitted in accordance with COMSCINST 9330.6C of 30 April 1981. Support personnel and Navy personnel are quartered in existing facilities that are appropriate to the rank of officer involved. Two existing department head staterooms on the 02 were left unassigned. Also left unassigned was a three-man transient officer bunkroom and a double stateroom on the 01 level.

The ships master, chief engineer, first officer and first assistant engineer are quartered on the 02 level. The purser and the chief steward are quartered forward on the 01 level. Ship junior officers are quartered on the 01, 02 and 03 levels. Accommodations for support and Navy detachment department heads are provided on the 02 level. Support and Navy junior officers are quartered on the 01 and 03 levels.

The master, chief engineer, first officer, first assistant engineer, purser and chief steward are quartered in complexes consisting of a stateroom, bath and office (Figures 4 and 5). The ships junior officers are quartered in single staterooms with private baths (Figure 6). Accommodations for support and Navy detachment department heads are existing single staterooms with lavatory facilities (Figure 7a). Support and Navy detachment junior officer accommodations are existing double staterooms with lavatory facilities (Figure 7b). Support and Navy officers, unless provided with private baths, will use existing community sanitary facilities.

The existing wardroom lounge, which is located between frames 17 and 26 on the main deck, will be used by the officers for lounging and recreation activities.

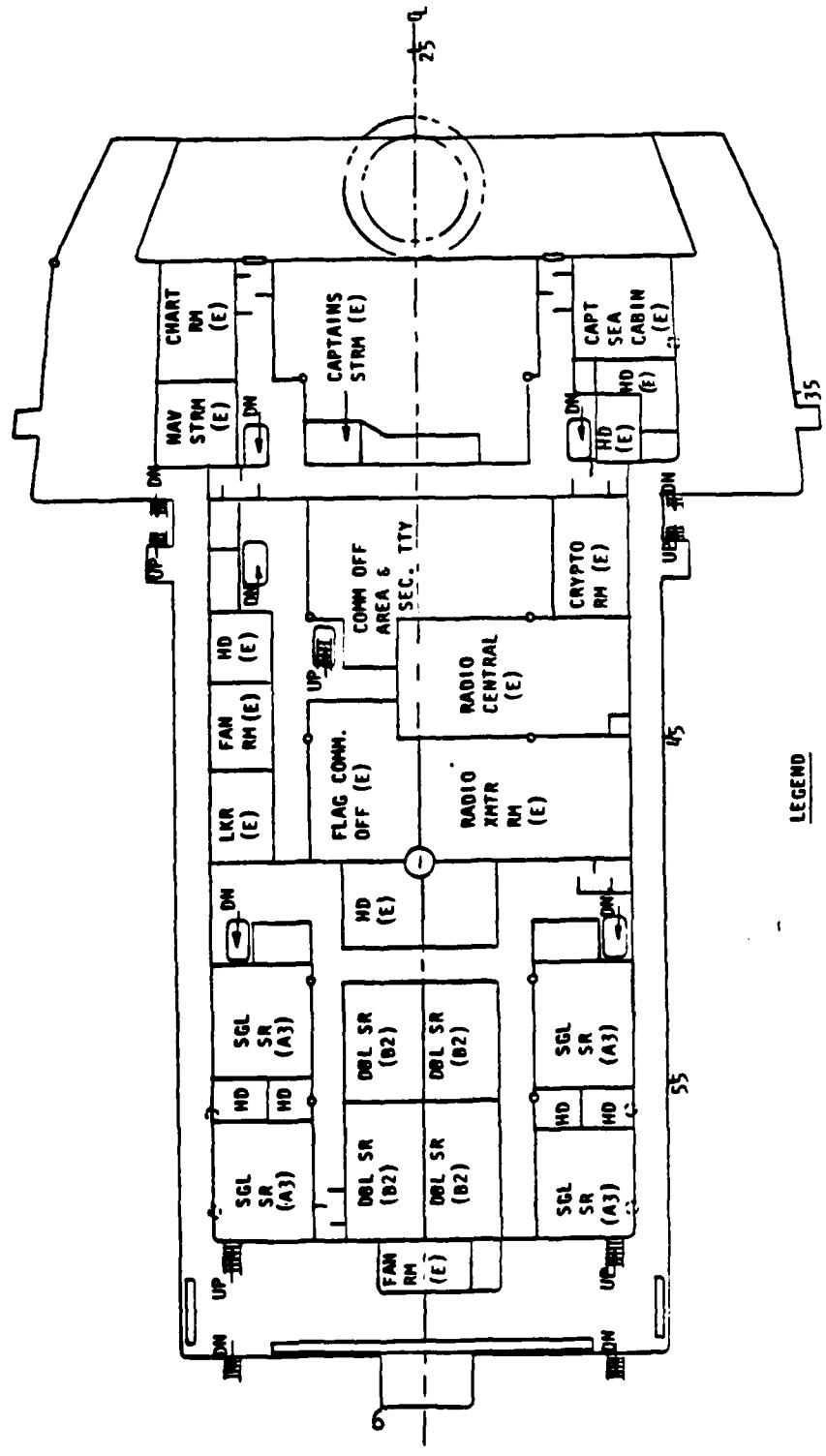
All existing living, sanitary and recreation facilities that are to be used by support and Navy personnel will remain intact, without modification to bulkheading, deck covering, furniture and the like.

4.2 CPO LIVING SPACES, SANITARY SPACE, AND RECREATION FACILITIES

4.2.1 Requirements for Ship Operators (MSC)

Accommodate 4 CPO's by providing:

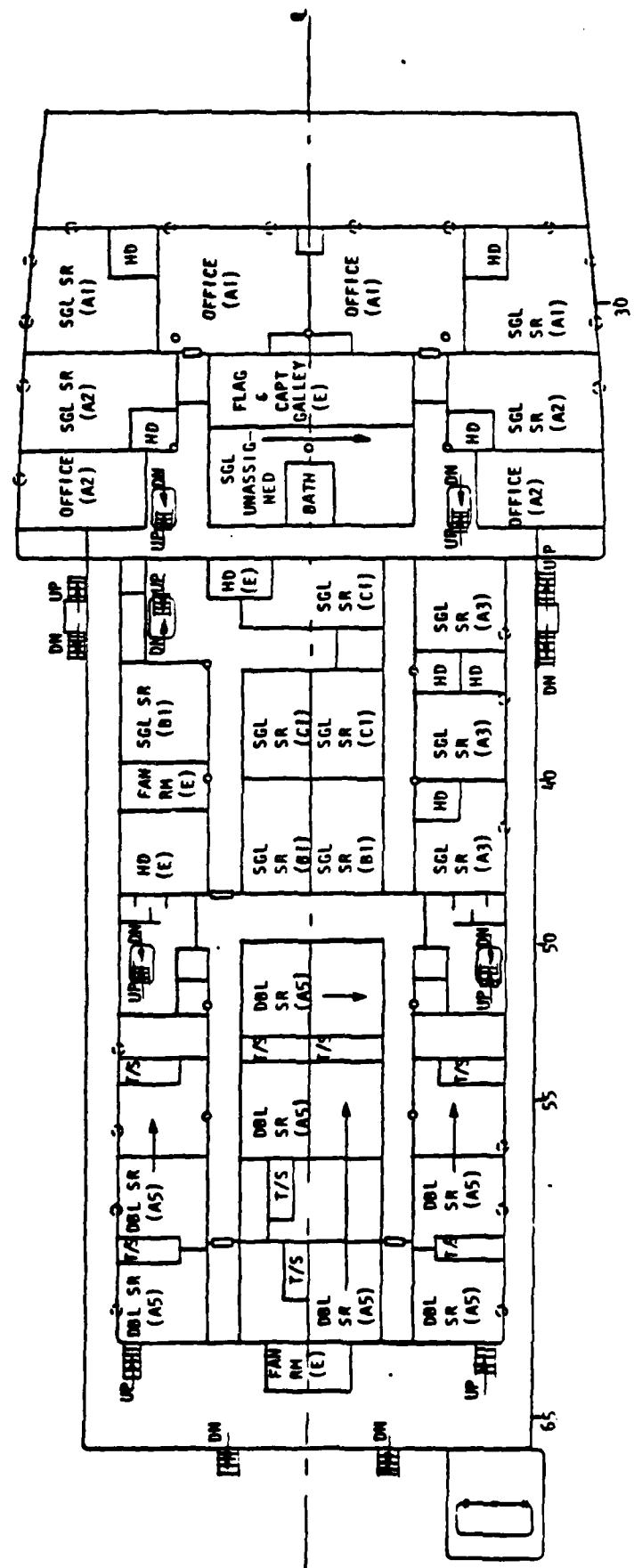
- a. Single stateroom accommodations with lavatory facilities and semi-private toilet and showers.
- b. Gross deck area within stateroom: 102 sq. ft.



<u>LEGEND</u>	<u>DESCRIPTION</u>	FIG
<u>SYMBOL</u>		
A3	J.O. (SHIP)	6
B2	J.O. (SUPPORT)	7b
E	EXISTING	
HD	SANITARY SPACE	

**GENERAL ARRANGEMENT
03 LEVEL**

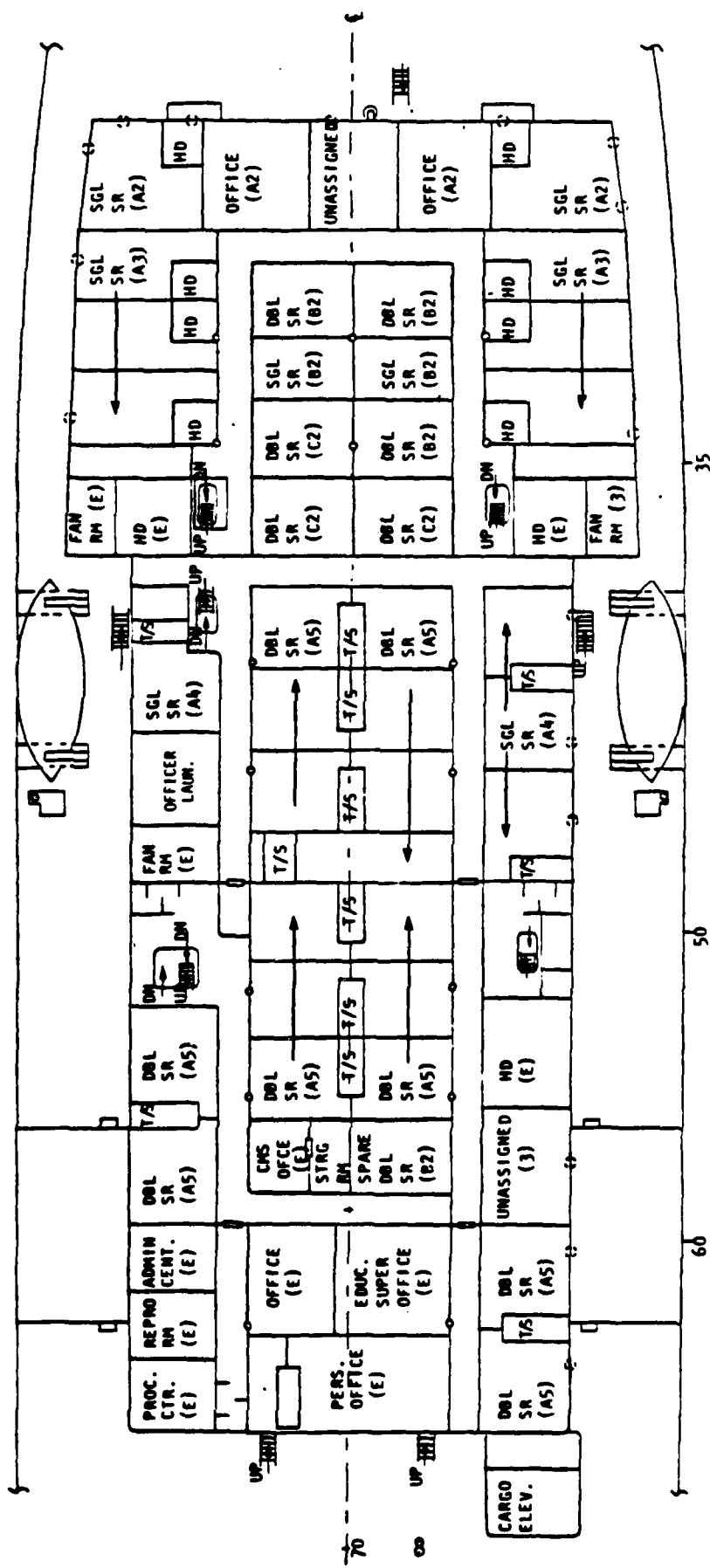
FIGURE 1



<u>LEGEND</u>	<u>DESCRIPTION</u>	<u>FIG</u>
SYMBOL		
A1	MA/CH ENGR (SHIP)	4
A2	DEPT. HD (SHIP)	5
A3	J. O. (SHIP)	6
A5	CREW (SHIP)	14
B1	DEPT. HD (SUPPORT)	7a
C1	DEPT. HD (NAVY)	7a
E	EXISTING	
HD	SANITARY SPACE	
T/S	TOILET & SHOWER	

FIGURE 2

**GENERAL ARRANGEMENT
02 LEVEL**

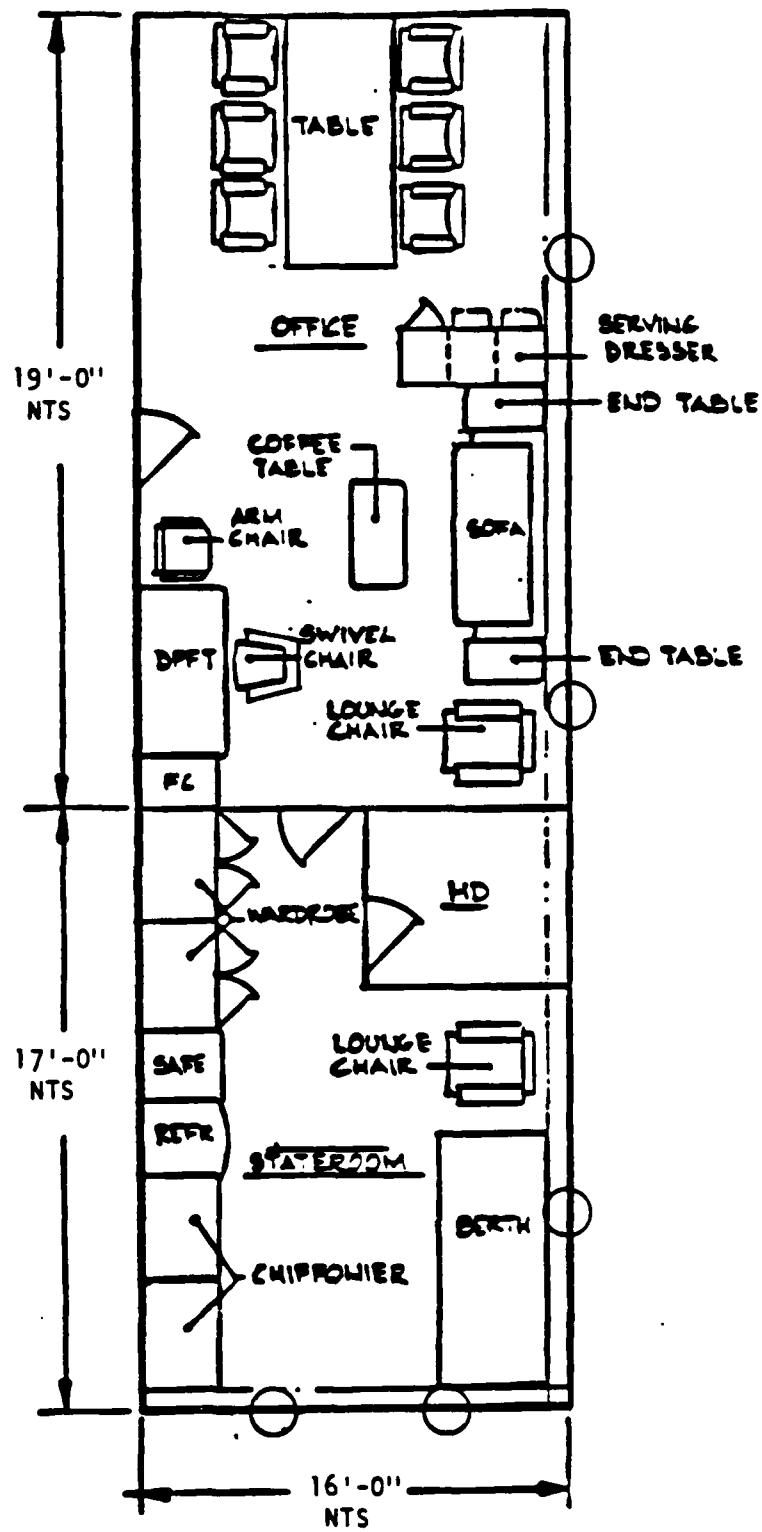


A2	DEPT. MD (SHIP)	5
A3	J.O. (SHIP)	6
A4	CPO (SHIP)	9
A5	CREW (SHIP)	14
B2	J.O. (SUPPORT)	7b
C2	J.O. (NAVY)	7b
E	EXISTING	
HO	SANITARY SPACE	
	TOILET/SHOWER	
	T/S	

LEGENDA

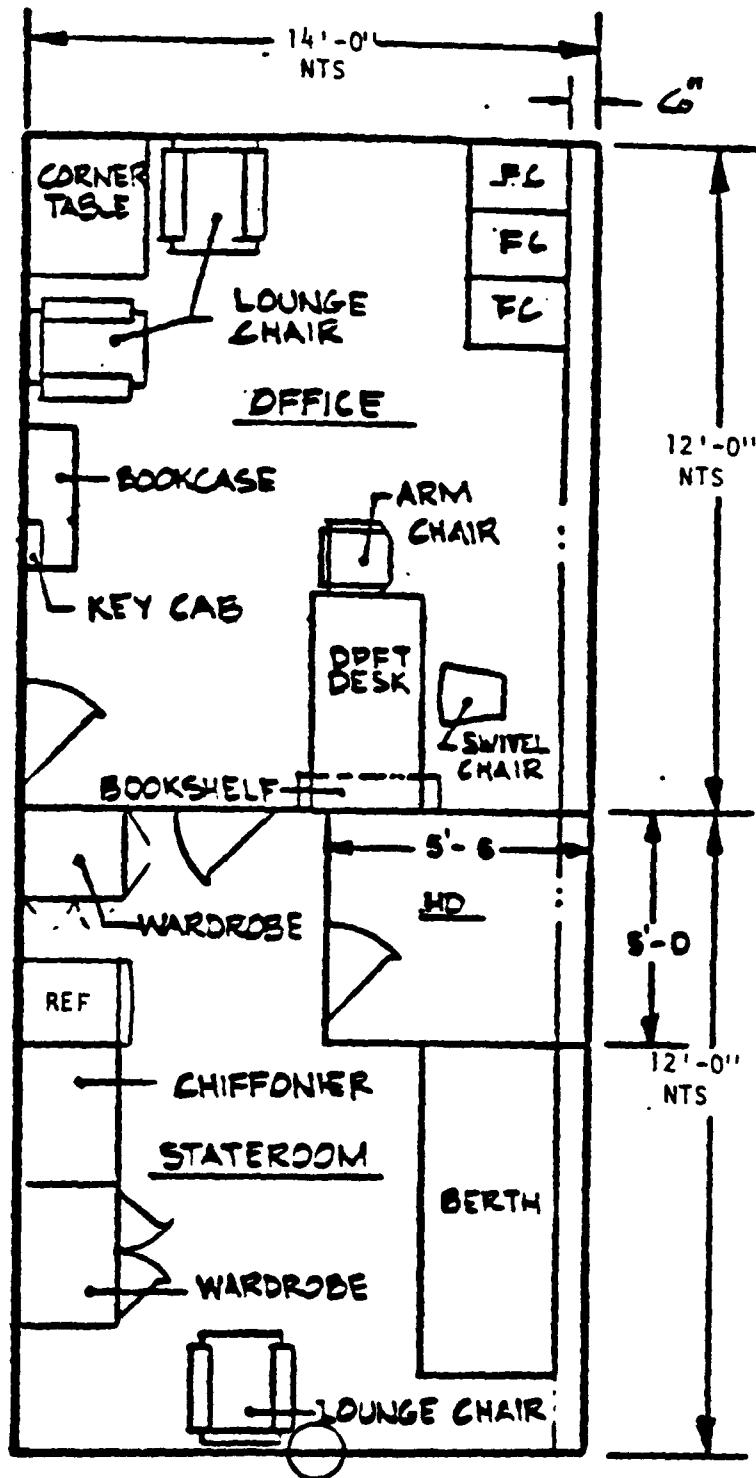
AD 37 CONVERSION
GENERAL ARRANGEMENT
01 LEVEL

FIGURE 3



MASTER/ CHIEF ENGINEER
STATEROOM & OFFICE

FIGURE 4.



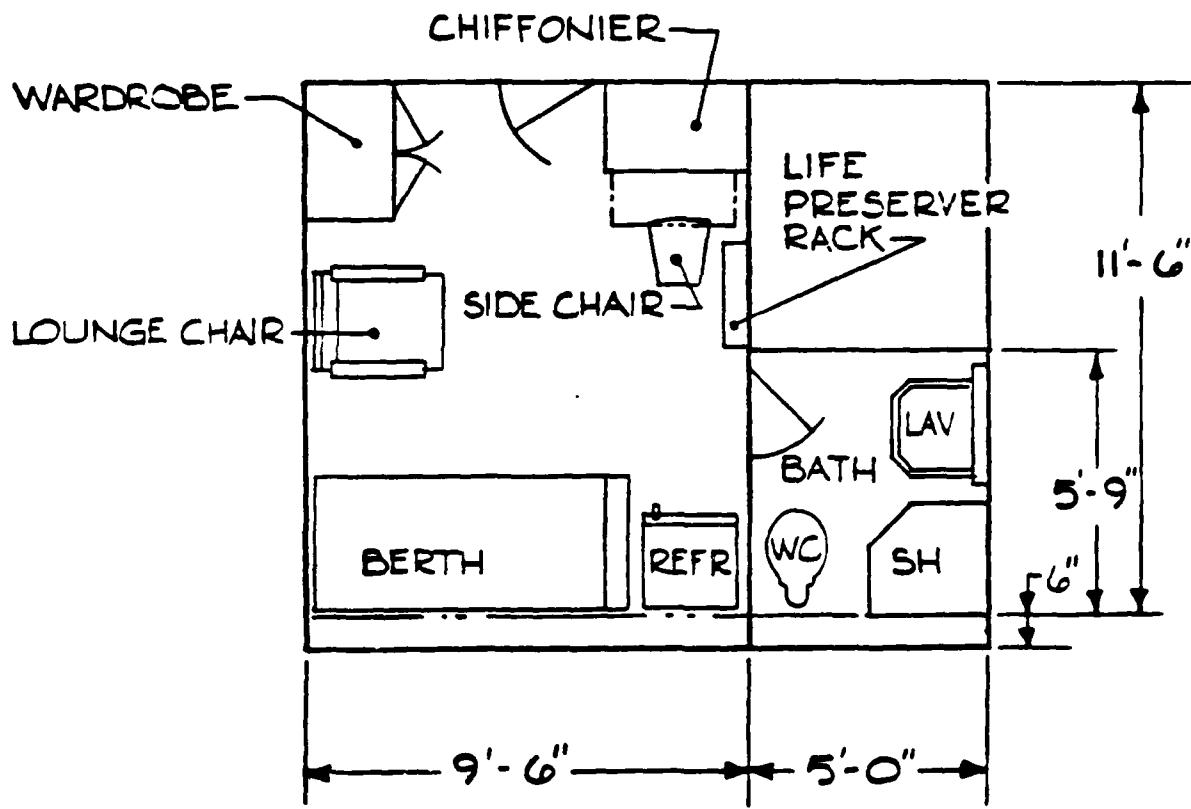
AREA - SR. 140 SQ. FT.

OFF. 168 SQ. FT.

FIRST OFFICER/FIRST ASST ENGR/PURSER/
CH STEWARD STATEROOM WITH OFFICE

1" = 1'-0"

FIGURE 5



AREA: 109 SQFT
JUNIOR OFFICER
SINGLE STATEROOM

$\frac{1}{4}'' = 1'-0''$

FIGURE 6

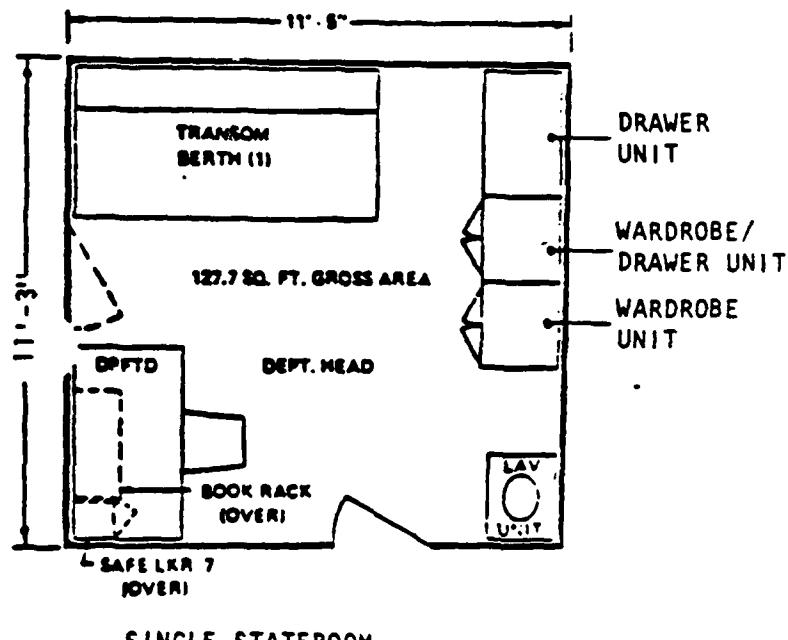


FIGURE 7a

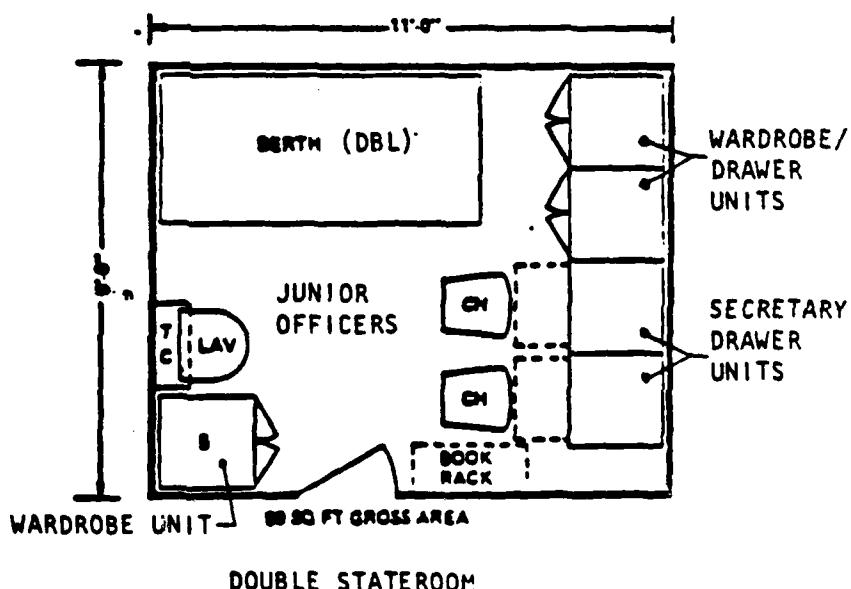


FIGURE 7b

EXISTING DEPT HD & J.O. STATEROOMS
FIGURES 7a & 7b

4.2.2

Requirements for Support Personnel (Ground Rules)

Accommodate 118 CPO's by providing:

- a. One berth per accommodation in 3-high berth tiers.
- b. Stowage for personal effects.
- c. Community sanitary facilities.

4.2.3

Requirements for Navy Detachment (Ground Rules)

Accommodate 4 CPO's by providing:

- a. One berth per accommodation in 3-high berth tiers.
- b. Stowage for personal effects.
- c. Community sanitary facilities.

4.2.4

Design Solution

The berthing, sanitary and recreation spaces of CPO's are located on the 2nd deck and 01 level (Figures 3 and 8). The quarters of ship CPO's are outfitted in accordance with COMSCINST 9330.6C of 30 April 1981. The furnishings for Navy and support CPO's are existing.

Ship CPO's are quartered on the 01 level in single staterooms with lavatories and semi-private toilet and showers as shown in Figure 9. Support and Navy CPO's are quartered in existing CPO living spaces with adjacent sanitary facilities on the 2nd deck. The support and Navy CPO's are provided 3-high berth tiers and stowage space for hanging long and short garments and personal effects (Figure 10).

The existing CPO lounge, compartment 2-28-0-L, is provided the CPO's for lounge and recreation activities (Figure 10).

Modifications are not anticipated to existing spaces that are assigned to Navy and support CPO's.

4.3

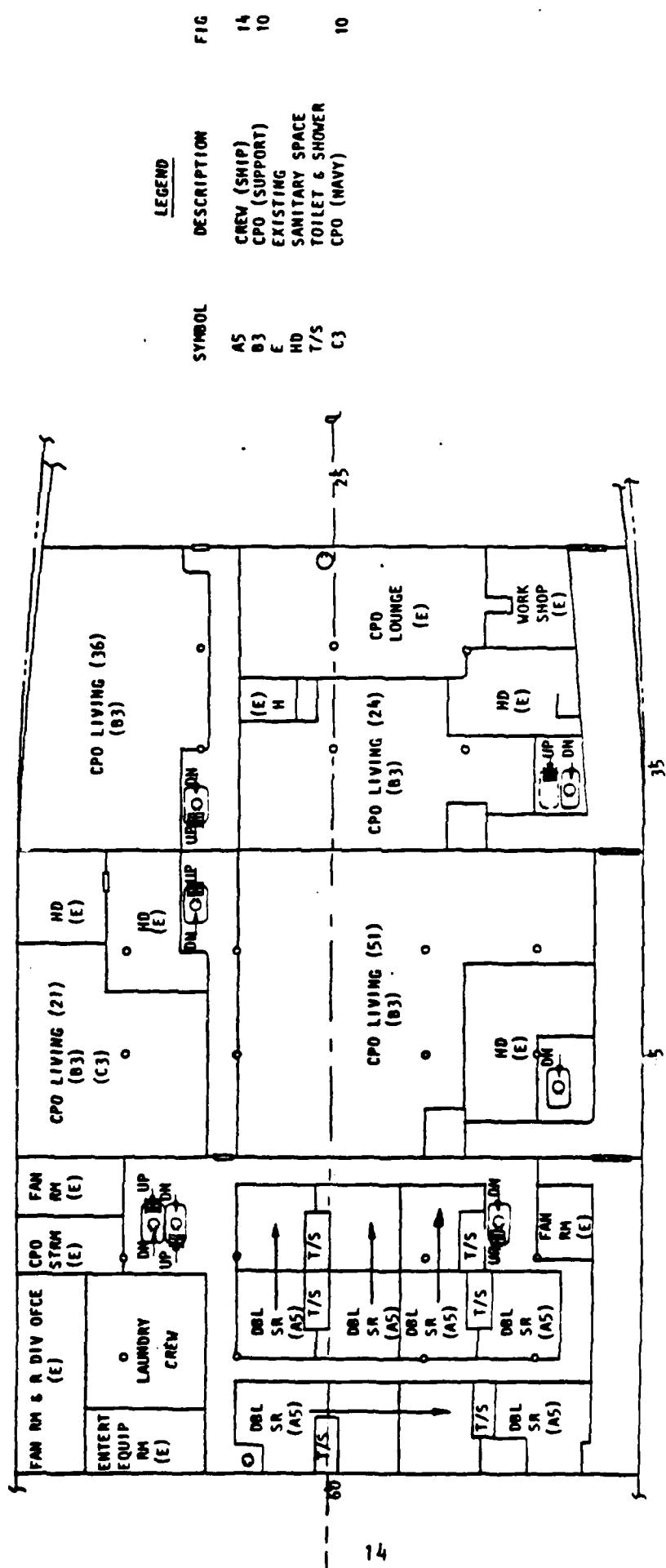
CREW LIVING, RECREATION AND SANITARY SPACES

4.3.1

Requirements for Ship Operators (MSC)

Accommodate 138 crew by providing:

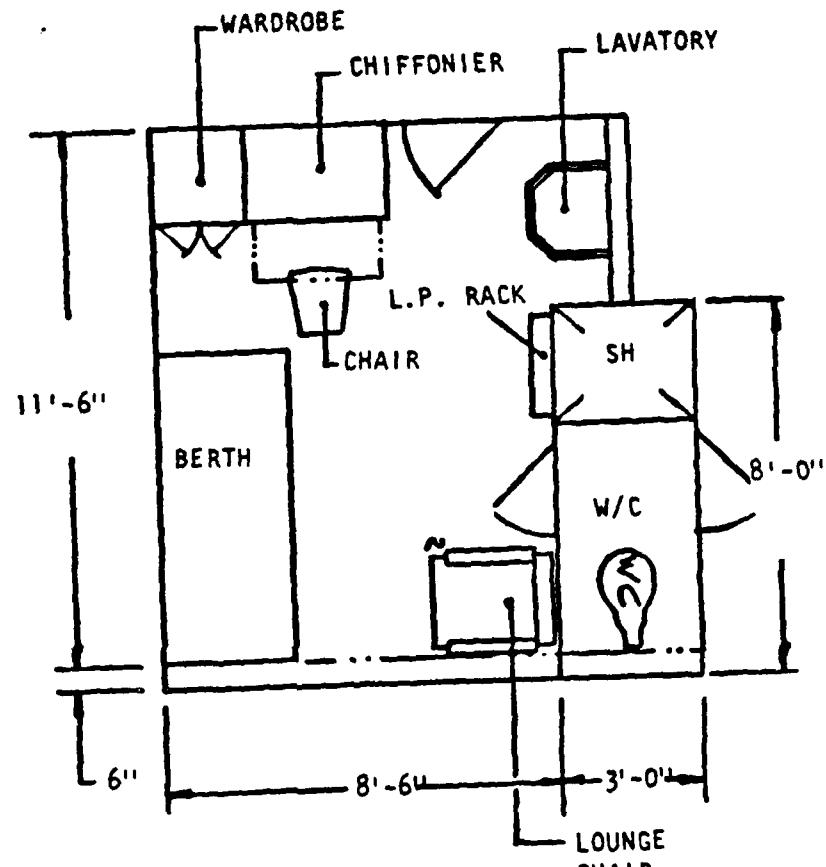
- a. One berth per accommodation in 2-man staterooms with lavatory facilities.
- b. Semi-private toilet and showers.
- c. Gross area within staterooms: 108 sq. ft.



NOTE: THERE ARE 10 EXTRA CPO BERTHS

**GENERAL ARRANGEMENT
2ND DECK**

FIGURE 8

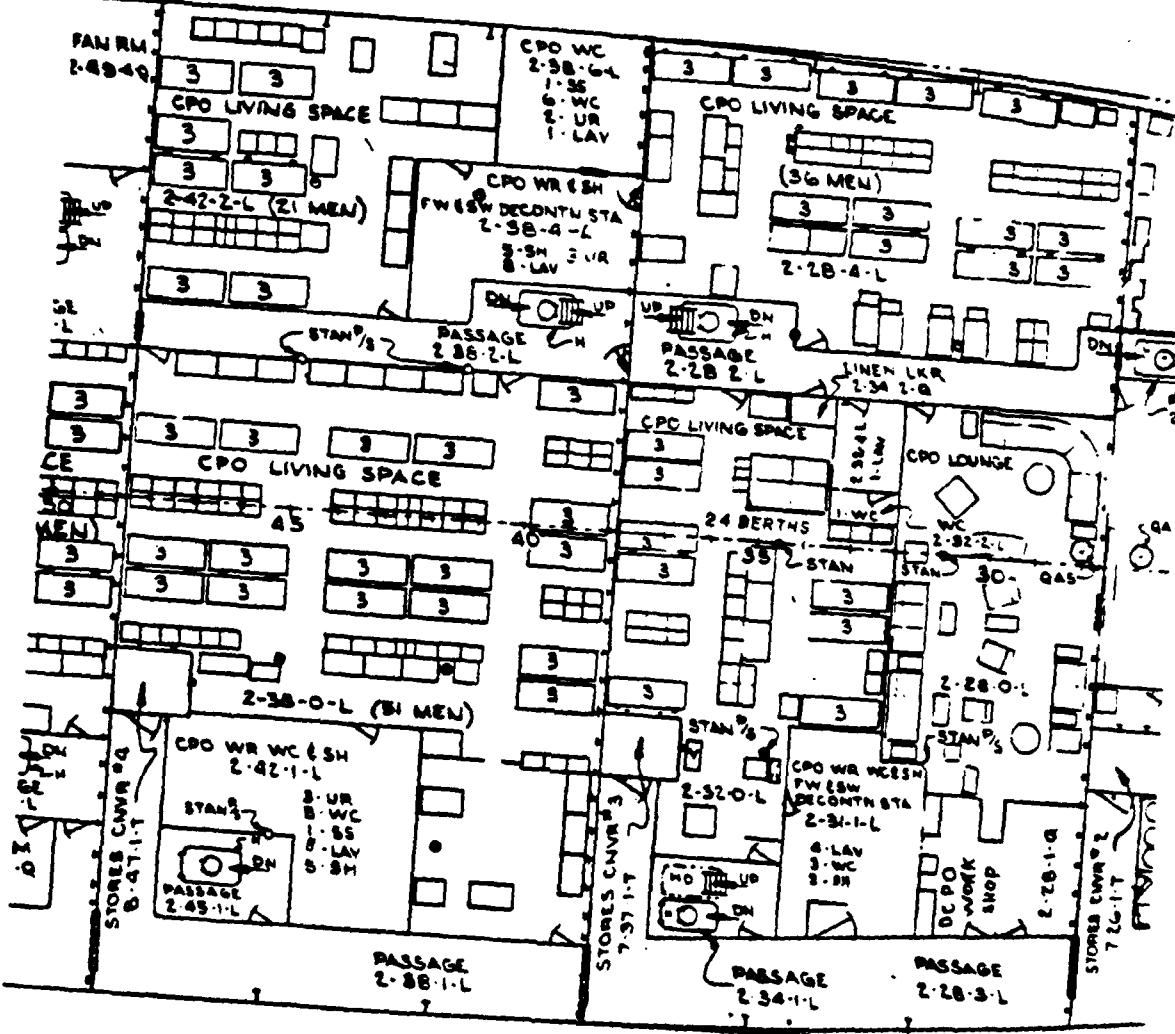


AREA - 102 SQ. FT.

SHIP CPO STATEROOM
 $1/4" = 1'-0"$

FIGURE 9

COUNSELOR OFICE
2-53-2-9



NAVY/SUPPORT CPO
LIVING SPACES
2ND DECK

FIGURE 10

4.3.2

Requirements for Support Personnel (Ground Rules)

Accommodate 977 crew by providing:

- a. One berth per accommodation in 3-high berth tiers.
- b. Stowage for personal effects.
- c. Community sanitary facilities.

4.3.3

Requirements for Navy Detachment (Ground Rules)

Accommodate 55 crew by providing:

- a. One berth per accommodation in 3-high berth tiers.
- b. Stowage for personal effects.
- c. Community sanitary facilities.

4.3.4

Design Solution

Crew berthing, sanitary and recreation spaces are located on the 01 and 02 levels, 2nd, 3rd and 4th decks and first platform (Figures 2, 3, 11, 12, and 13). The quarters of ships crew are outfitted in accordance with COMSCINST 9330.6C of 30 April 1981. The furnishings for Navy and support crew quarters are existing.

Ship crew members are quartered on the 01 and 02 levels, and on the 2nd and 3rd decks in 2-man stateroom with lavatories and semi-private toilet and shower facilities as illustrated in Figure 14. The support crew are quartered in existing berthing spaces with adjacent sanitary facilities on the 4th deck and first platform. Navy crew members are quartered in an existing crew compartment located on the 3rd deck (Figure 11). The quarters for support and Navy crew are furnished with 3-high berth tiers, and lockers for stowing short hanging garments and personal effects (Figures 12 and 13).

An existing crew recreation room, compartment 4-70-0-L, with adjacent crew library, compartment 4-70-1-L, is provided for the crew (Figure 12).

Modifications to the existing berthing, sanitary and recreation facilities which are assigned to support and flag personnel are not required.

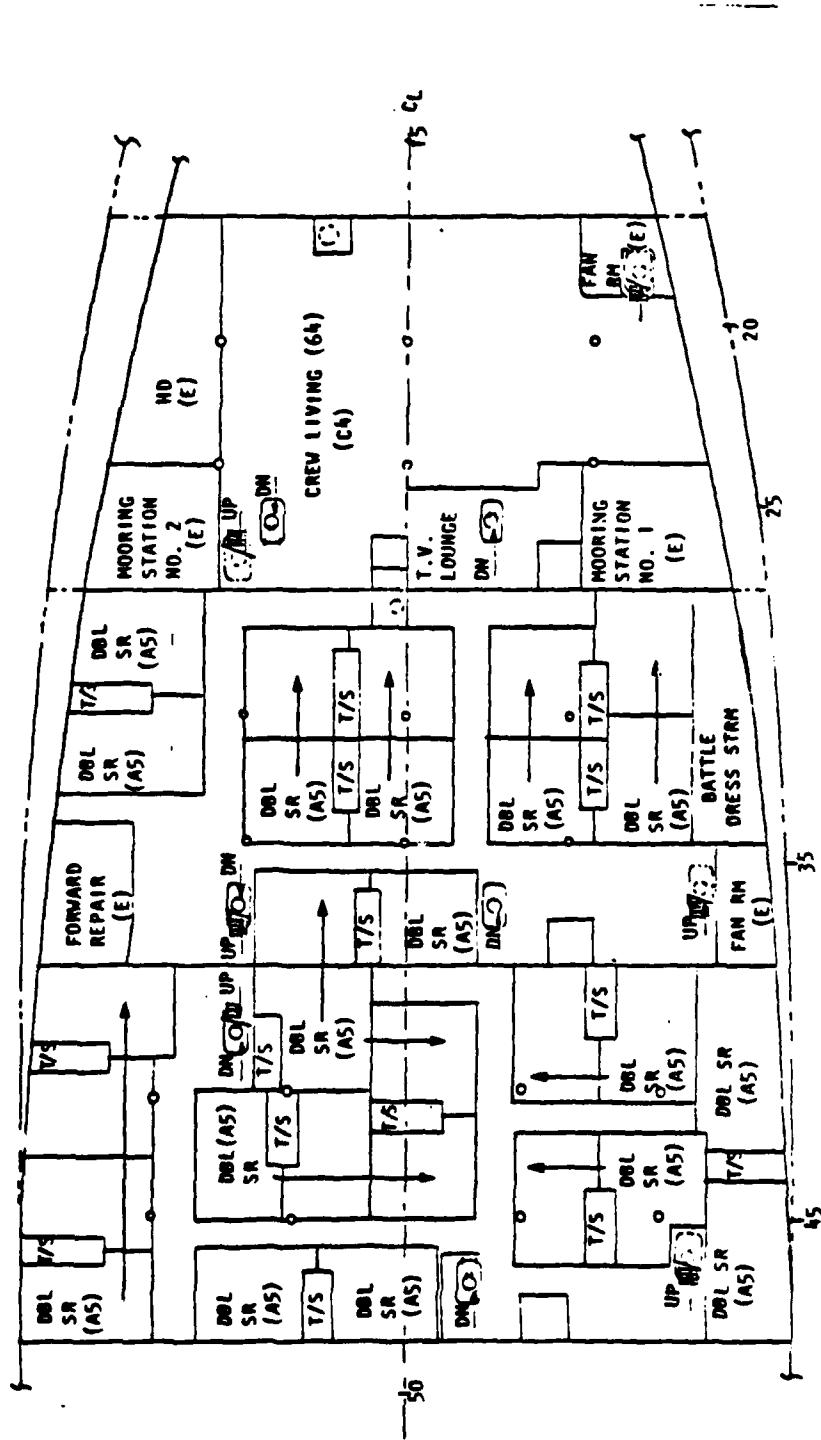
4.4

FOOD SERVICE FACILITIES

4.4.1

Requirements (Ground Rules)

- a. Provide cafeteria style service for all ship and military personnel.
- b. Provide food service for support personnel when such personnel must deploy with the ship.

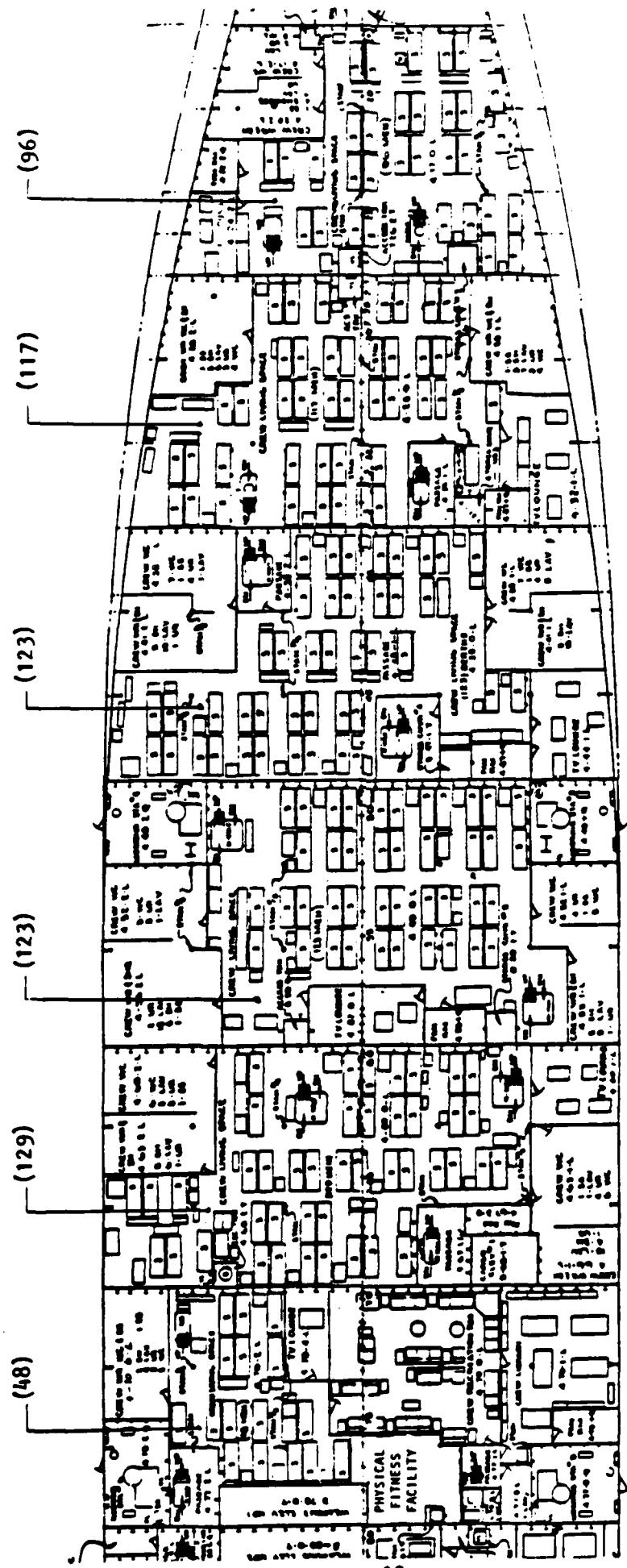


NOTE: THERE ARE 9 EXTRA CREW BERTHS

<u>LEGEND</u>	<u>DESCRIPTION</u>	FIG
<u>SYMBOL</u>		
AS	CREW (SHIP)	14
CH	CREW (NAVY)	
E	EXISTING	
HD	SANITARY SPACE	
T/S	TOILET & SHOWER	

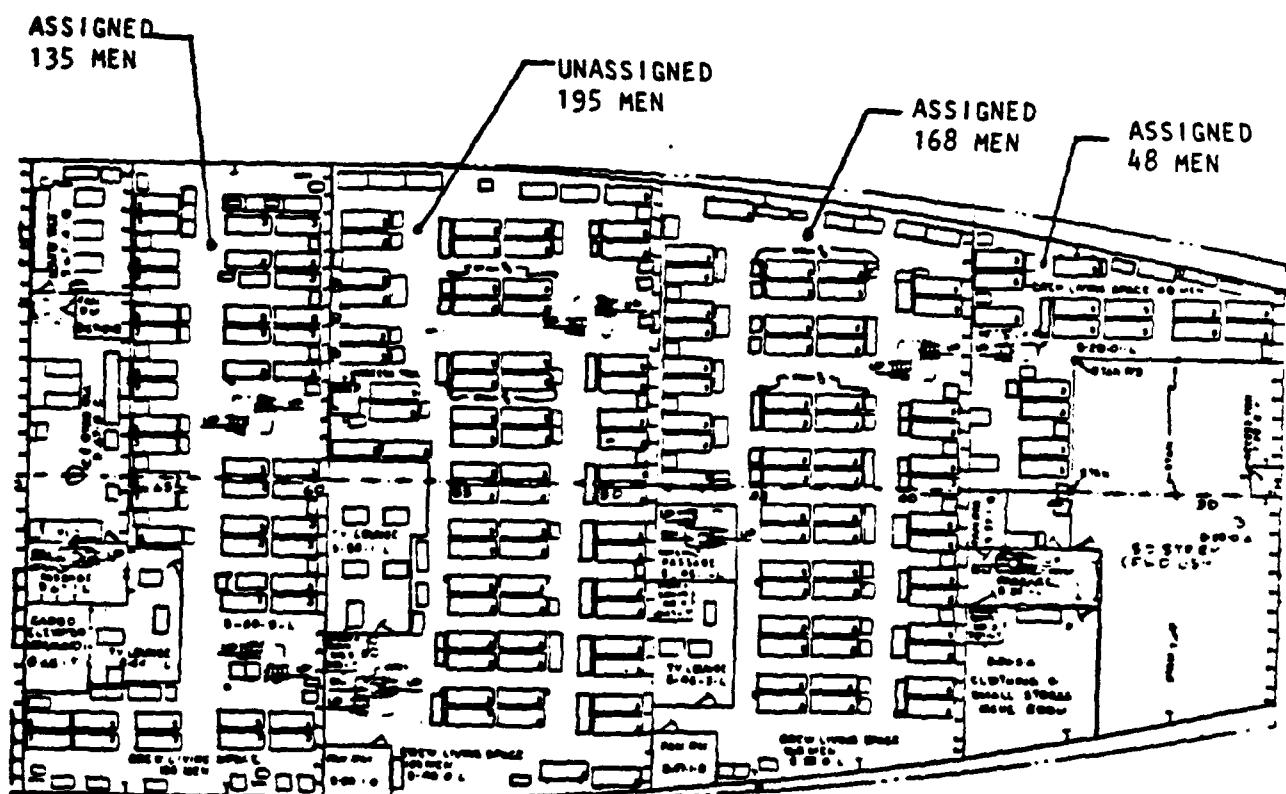
**GENERAL ARRANGEMENT
3RD DECK**

FIGURE 11



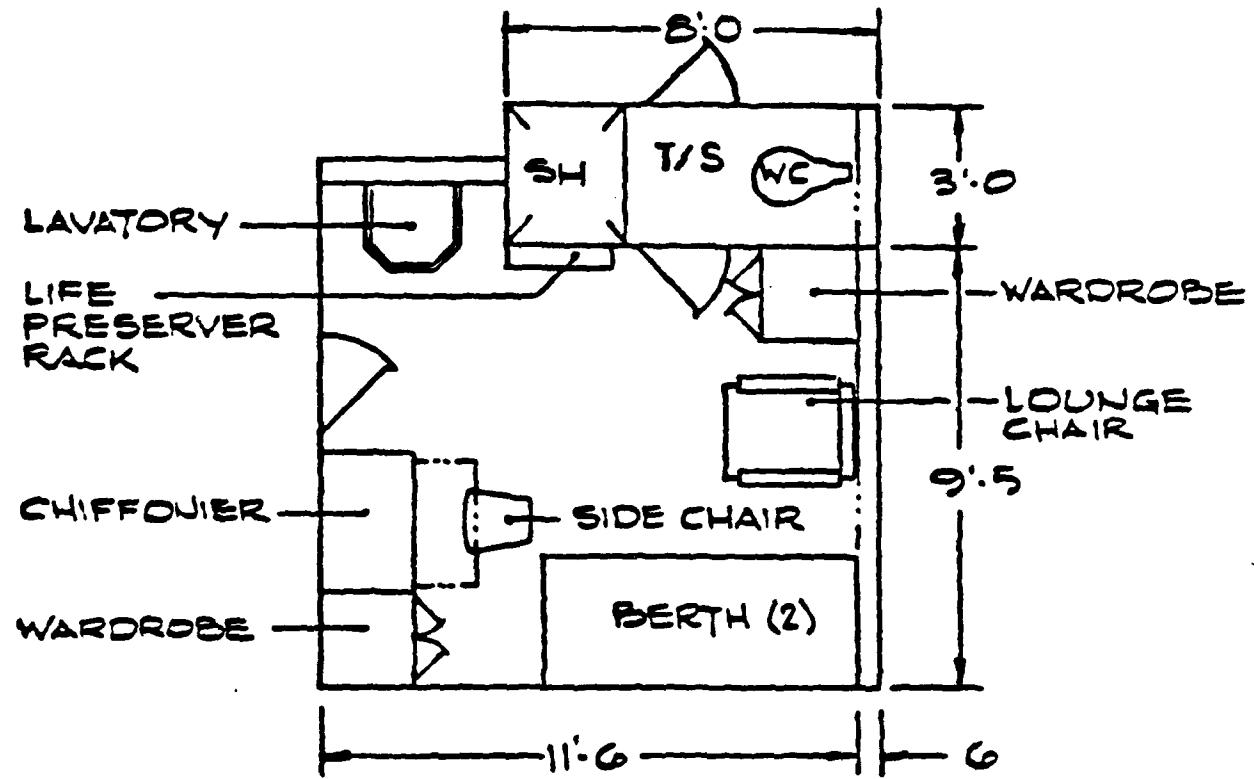
636 MEN ASSIGNED
SUPPORT CREW LIVING SPACES
4TH DECK - $1/16'' = 1' - 0''$

FIGURE 12



351 MEN ASSIGNED
SUPPORT CREW LIVING SPACES
1ST PLATFORM - $1/16'' = 1'-0''$

FIGURE 13



AREA=113 SQ FT

CREW DOUBLE
STATEROOM
 $1/4 = 1'0$

FIGURE 14

- c. Ship and military personnel to share dining facilities.
- d. Provide separate dining areas for officers, CPO's and crew.
- e. The number of seats in the ship and Navy officers dining area shall be 100 percent of ship's officers. This translates into a requirement for 27 seats.
- f. The number of seats in the ship and Navy CPO dining area shall be 60 percent of ship CPO's. 5 seats shall be provided the ship CPO's.
- g. The number of seats in the ship and Navy crew dining area shall be 60 percent of ship crew. This translates into a requirement for 116 seats.
- h. Utilize existing food service equipment and furnishings.

4.4.2

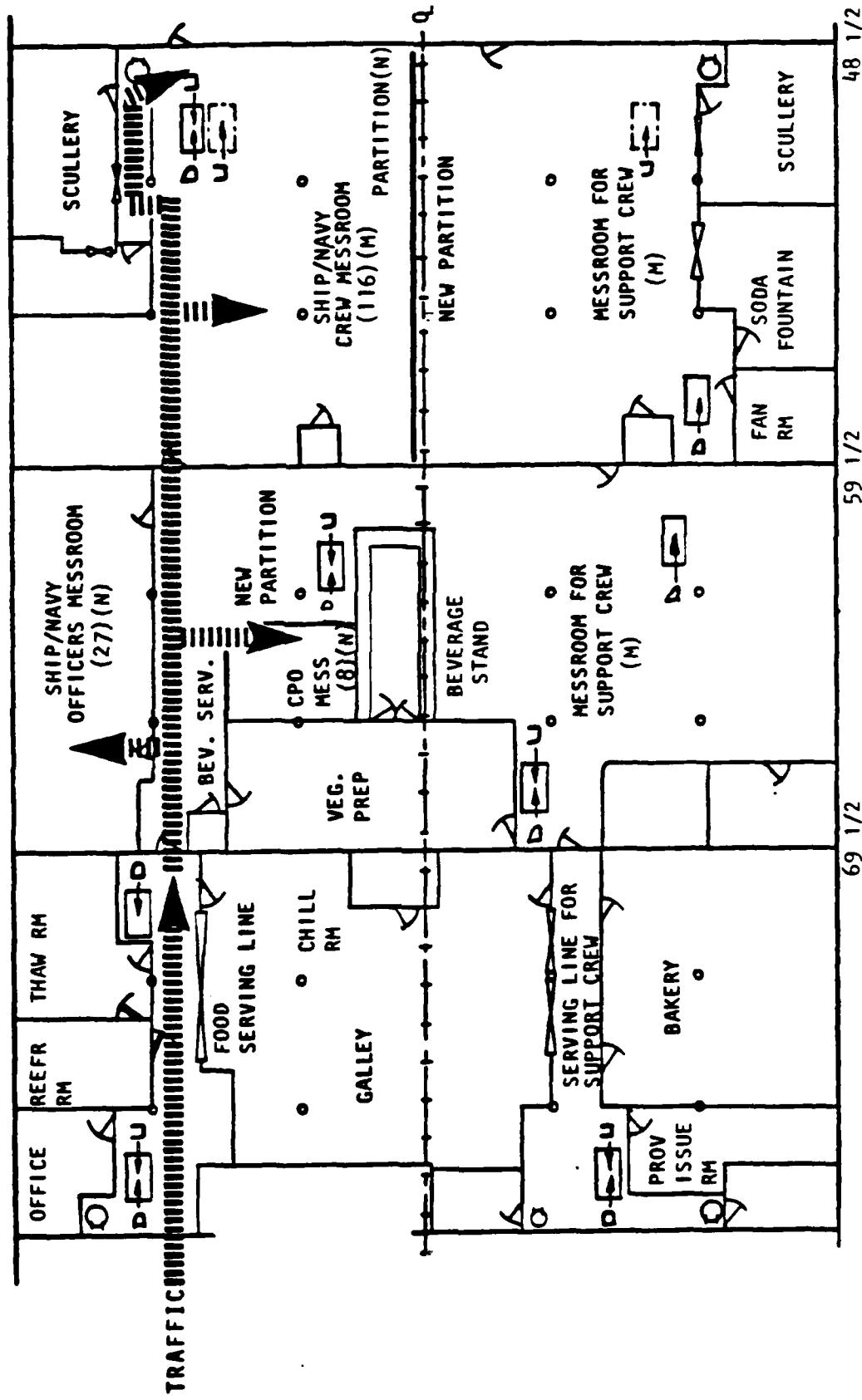
Design Solution

The AD 37 is capable of preparing and serving breakfast, lunch, and dinner to 1800 officers, CPO's and crew in a two-hour period. Meals for officers are prepared in a wardroom galley on the main deck and served traditional style by messmen specialist in an adjacent 66 seat messroom. Meals for CPO's are prepared in a CPO galley on the 2nd deck and receive sit-down service similar to the officers in an adjacent 76 seat messroom. The crew are served cafeteria style and dine in a 400 seat (approximate) messroom on the 3rd deck. Also, food service facilities are provided to the flag officers on the O2 level.

After review of the AD 37 food service systems and messing facilities it was determined that the existing crew food service complex located on the third deck between frames 49 and 70 (Figure 15) will provide the necessary equipment and area required to feed the 160 ship operators and 68 Navy personnel.

The food service system selected will require minimal alterations to the existing food service facilities. Ship and Navy personnel pick up their meal, cafeteria style, at the port side serving window of the crew galley (3-70-01-Q) and proceed to existing beverage equipment that was relocated for their convenience. Messrooms are provided for officers, CPO's, and crew as follows:

- a. The existing first class messroom, 3-60-2-L, and the mess deck office, 3-68-2-Q, will be used for the officers. New 4-man tables, chairs and a serving dresser with coffee maker, toaster, refrigerator and flake ice/water dispenser are provided. Seating for 28 officers is provided.



FOOD SERVICE & MESSING FACILITY
MAIN DECK - 1/16" = 1'-0"

FIGURE 15

- b. New partitions will be installed to provide an area within the existing crew messroom for seating 8 CPO's. New tables and chairs are provided.
- c. A new partition will be constructed along the ship's centerline extending from frame 48 1/2 to 59 1/2 and the first class lounge, 3-58-2-L, removed to provide a 116 seat crew mess area. New tables, chairs and serving dresser with coffee maker, toaster, refrigerator and flake ice/water dispenser are provided.

The existing port side crew scullery will be used by all personnel. No change to the existing compartmentation or access is required.

When support personnel deploy with the ship, all of the CPO's and crew members will use the 3rd deck food service and messing facilities. Meals for officers will be prepared in the existing wardroom galley, and served traditional style in the existing wardroom messroom (Figure 16). The existing CPO galley and messroom (Figure 17) should not be needed when the ship is operated by MSC personnel.

4.5 DRY, FROZEN AND CHILL STOREROOMS

Refrigerator, Thaw, Chill and Dry Provision Issue Rooms are located near the crew galley as shown in Figure 15. Additional Freeze, Chill and Dry Provision Storerooms are located on the 2nd and 3rd platform and in the hold. These facilities should not require modification unless a reduction in capacity is desired.

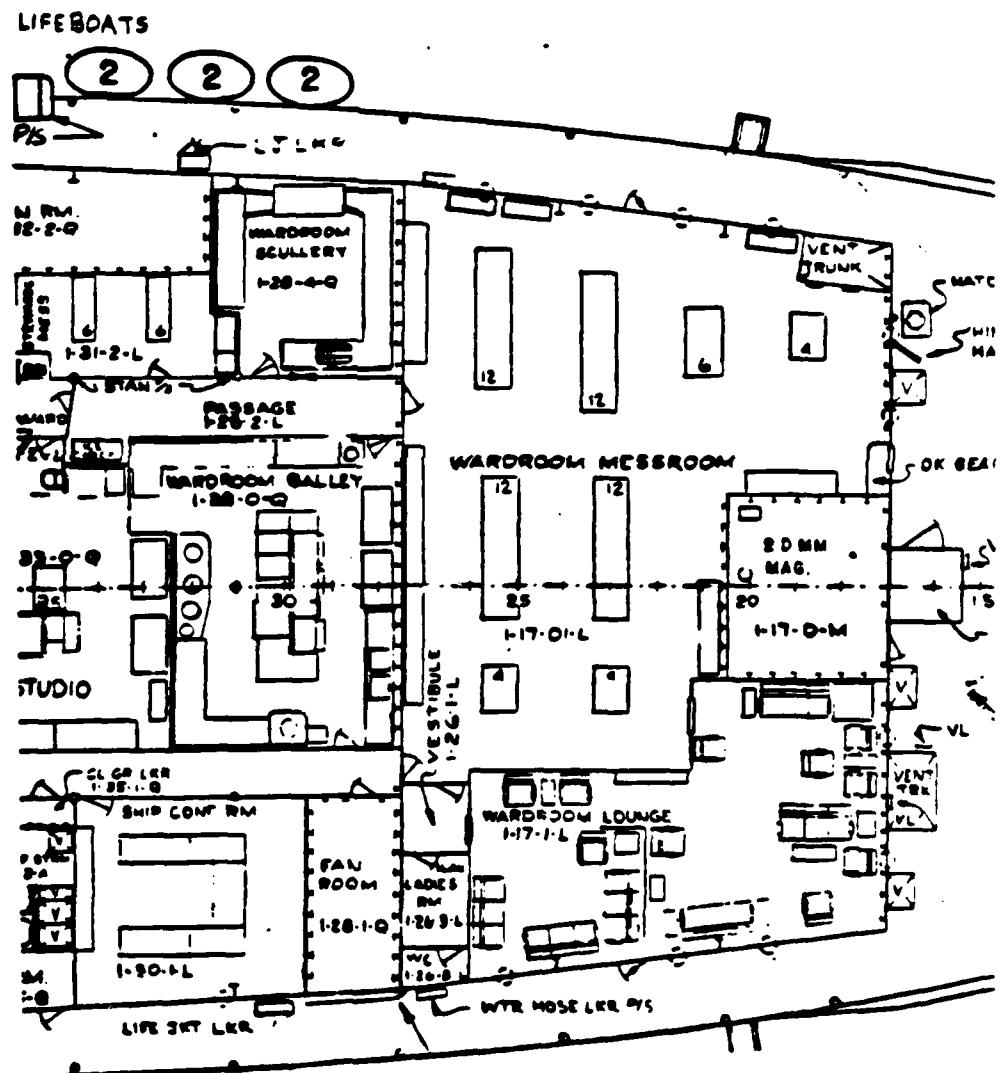
4.6 MEDICAL AND DENTAL FACILITIES

The medical and dental facilities existing in the AD 37 (Figure 18) will provide the ship operators, support personnel, and Navy detachment with the necessary medical and dental care. Modifications should not be required.

4.7 LAUNDRY FACILITIES

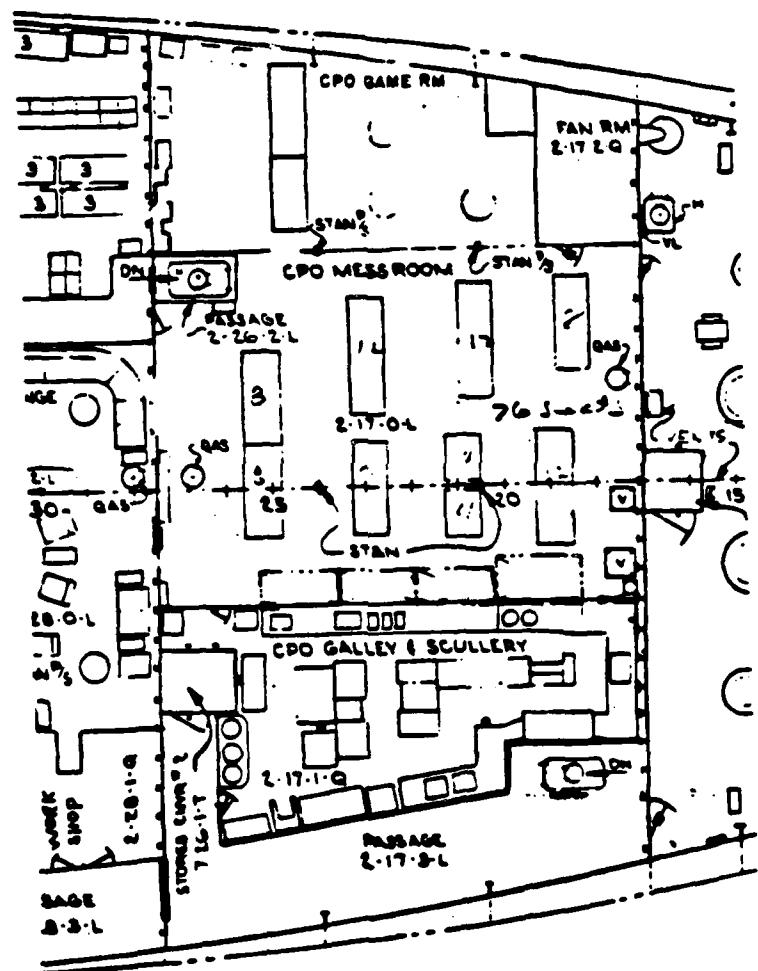
The ship operators and the military detachment will share self-service laundry facilities. The officers self-service laundry is located on the O1 level and equipped with commercial washers and dryers, sorting table, laundry tub, ironing boards and irons as shown in Figure 19. The crew self-service laundry is located on the 2nd deck and also equipped with commercial washers and dryers, sorting table, laundry tubs, ironing boards and irons as shown in Figure 20.

The existing ships laundry compartment, 4-80-01-Q, will provide laundry service for the support personnel. Although dry cleaning may not be required, a dry cleaning shop, compartment 4-80-0-Q, exists near the ship's laundry. The ship's laundry and dry cleaning shop are located on the 4th deck and equipped with industrial type laundering and dry cleaning equipment as shown in Figure 21. Modifications to the existing ships laundry is not required in this report.



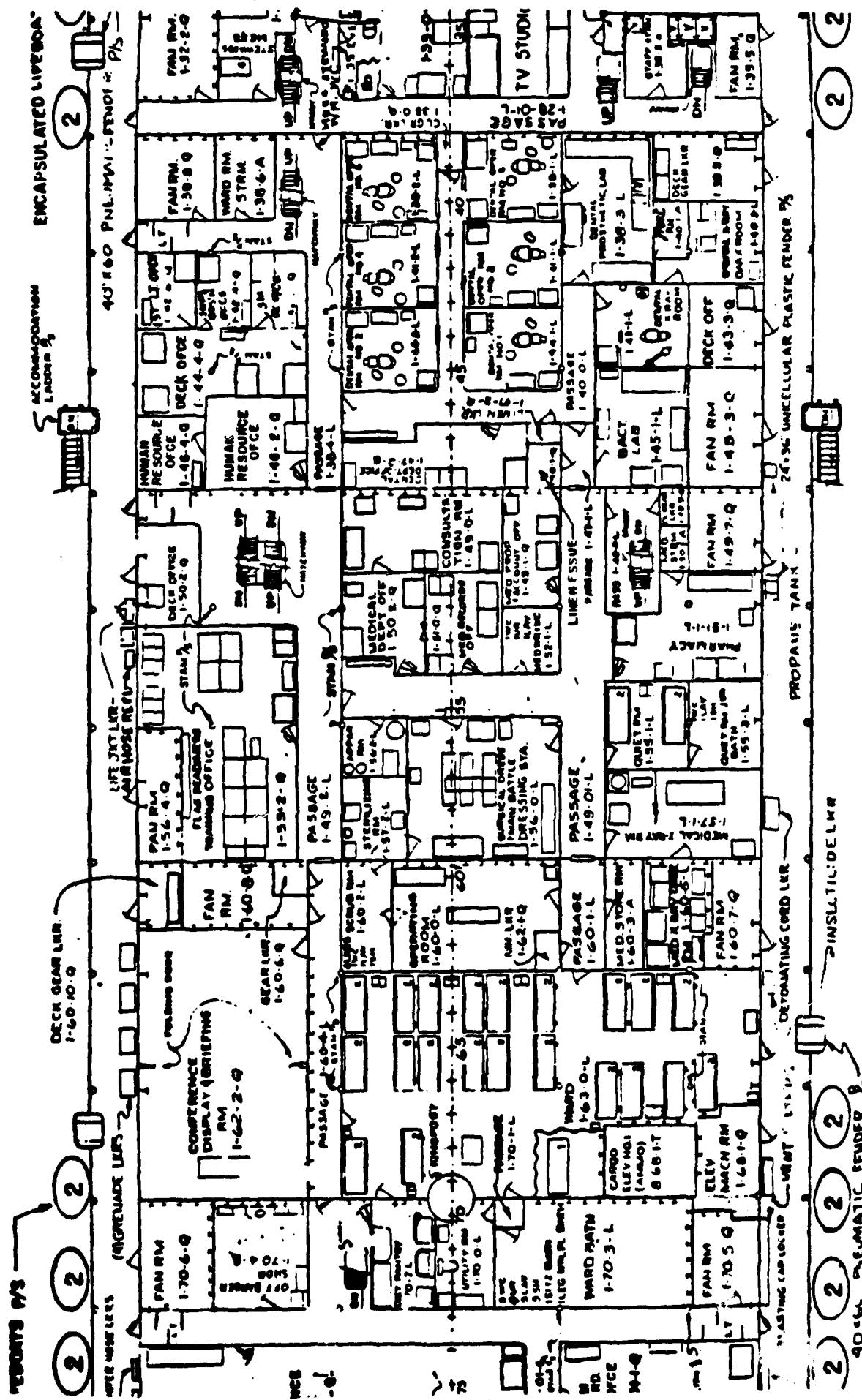
MAIN DECK
WARDROOM GALLEY & MESSROOM

FIGURE 16



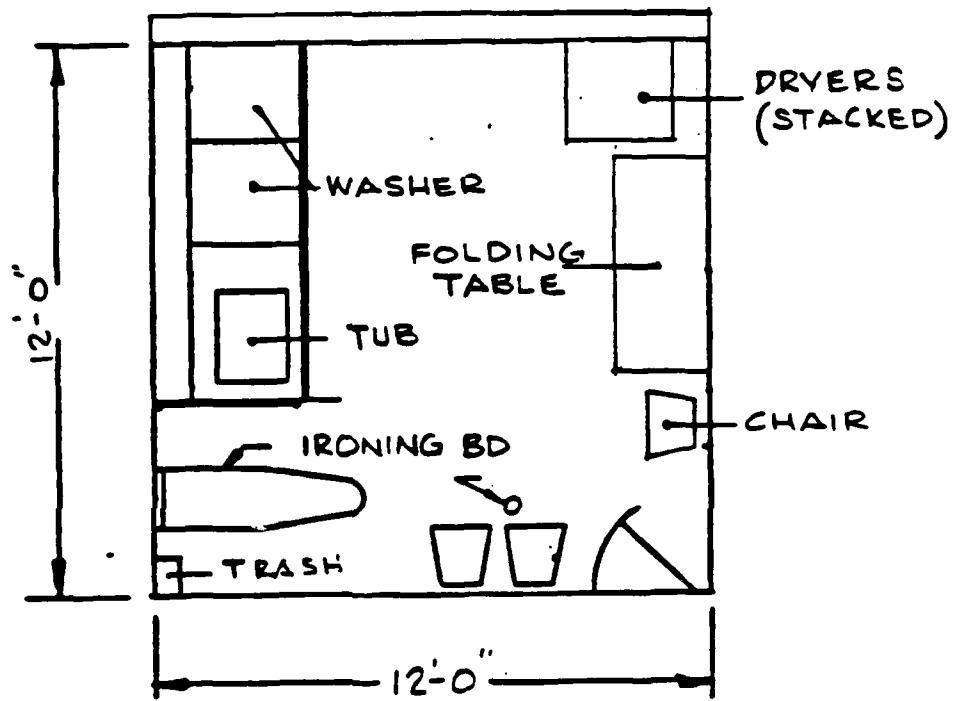
2ND DECK
CPO MESSROOM & GALLEY

FIGURE 17



MAIN DECK
MEDICAL & DENTAL DEPARTMENT

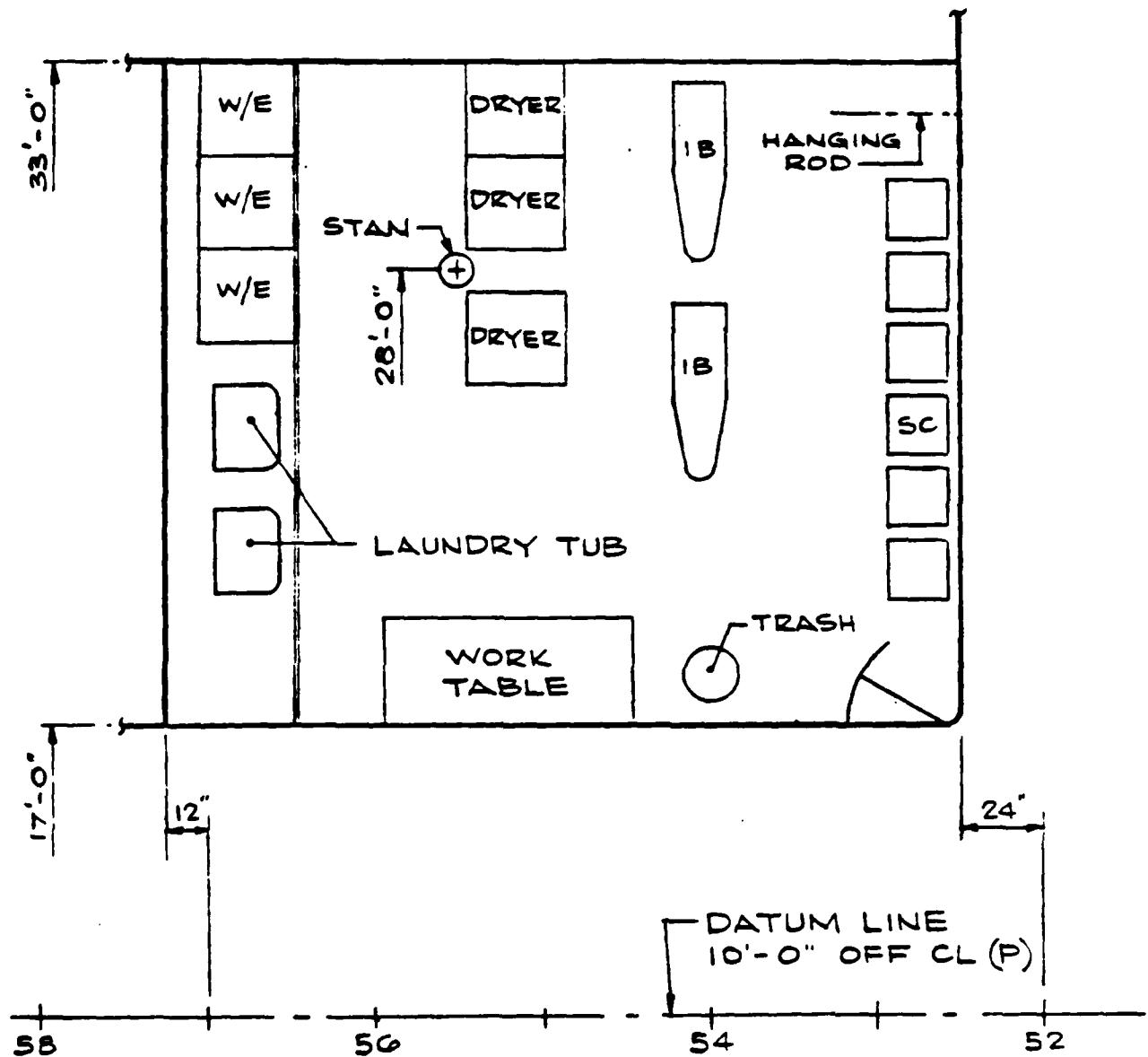
FIGURE 18



REF C.L. 7

47 44

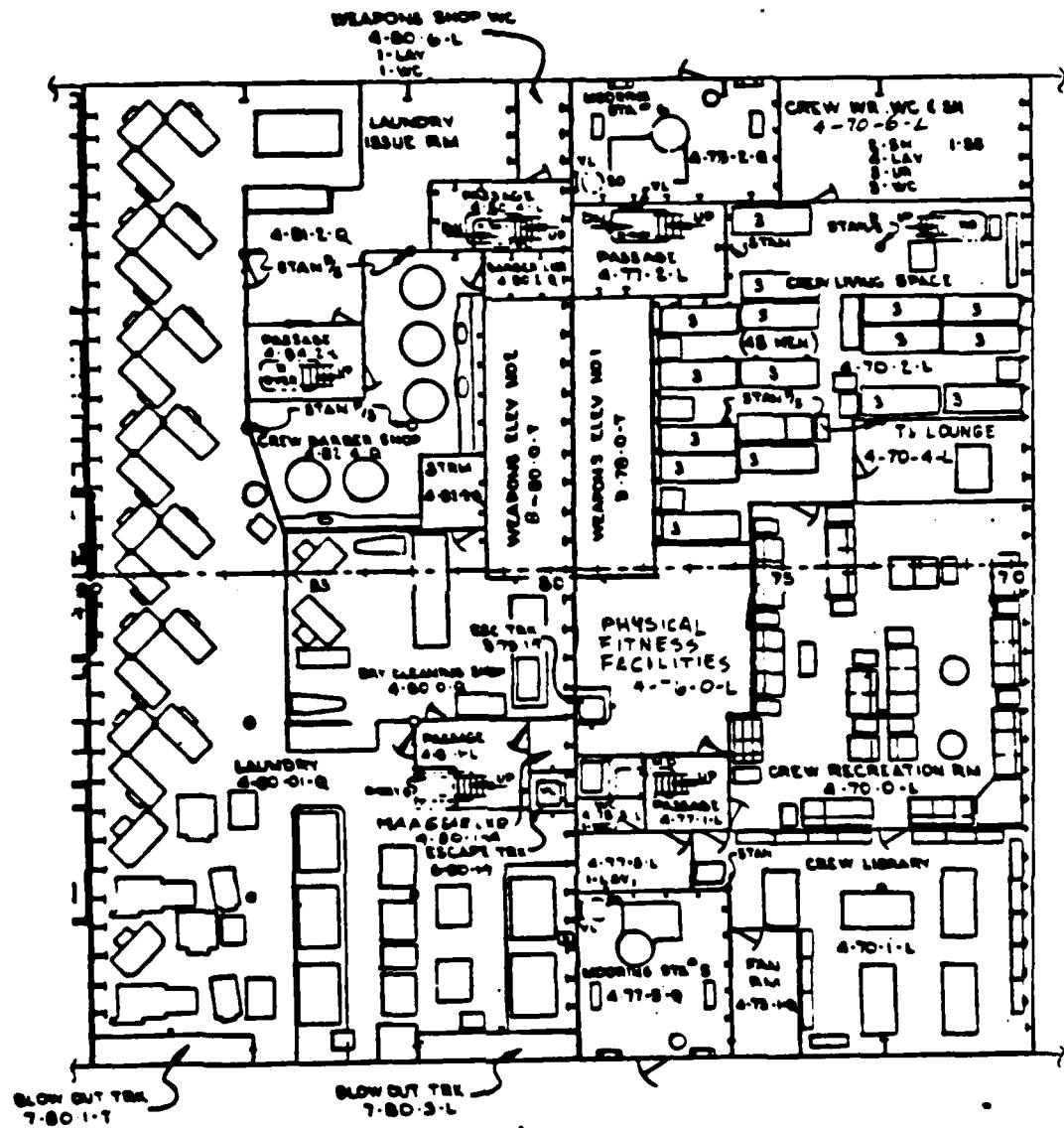
AREA = 144 SQ. FT.
OFFICER LAUNDRY - 01 LEVEL
FIGURE 19



CREW LAUNDRY ~ 2ND DK

AREA = 304 SQ FT
SCALE 1/4" = 1'-0"

FIGURE 20



E = EXISTING
N = NEW

LAUNDRY (E), BARBER SHOP (E),
& PHYSICAL FITNESS FACILITIES (N)
4TH DECK

FIGURE 21

4.8 BARBER SHOP

An existing 5-chair barber shop will provide the ship operators, military detachment and support personnel with the required barbering facilities. The barber shop is located adjacent to the existing laundry on the 4th deck (Figure 21). Modifications to this facility is not proposed in this report.

4.9 SHIP STORE

A walk-in ships store exists on the 3rd deck just aft of the crew galley (3-65-0-Q). This facility should be adequate; therefore, modifications are not considered.

4.10 PHYSICAL FITNESS FACILITY

A dedicated physical fitness facility does not exist on the AD 37. To conform with MSC standards a new 258 sq. ft. physical fitness facility is provided for the ship operators. The facility is equipped with the latest equipment and is intended to be used by all personnel (Figure 22). The physical fitness facility is located on the 4th deck as shown in Figure 21.

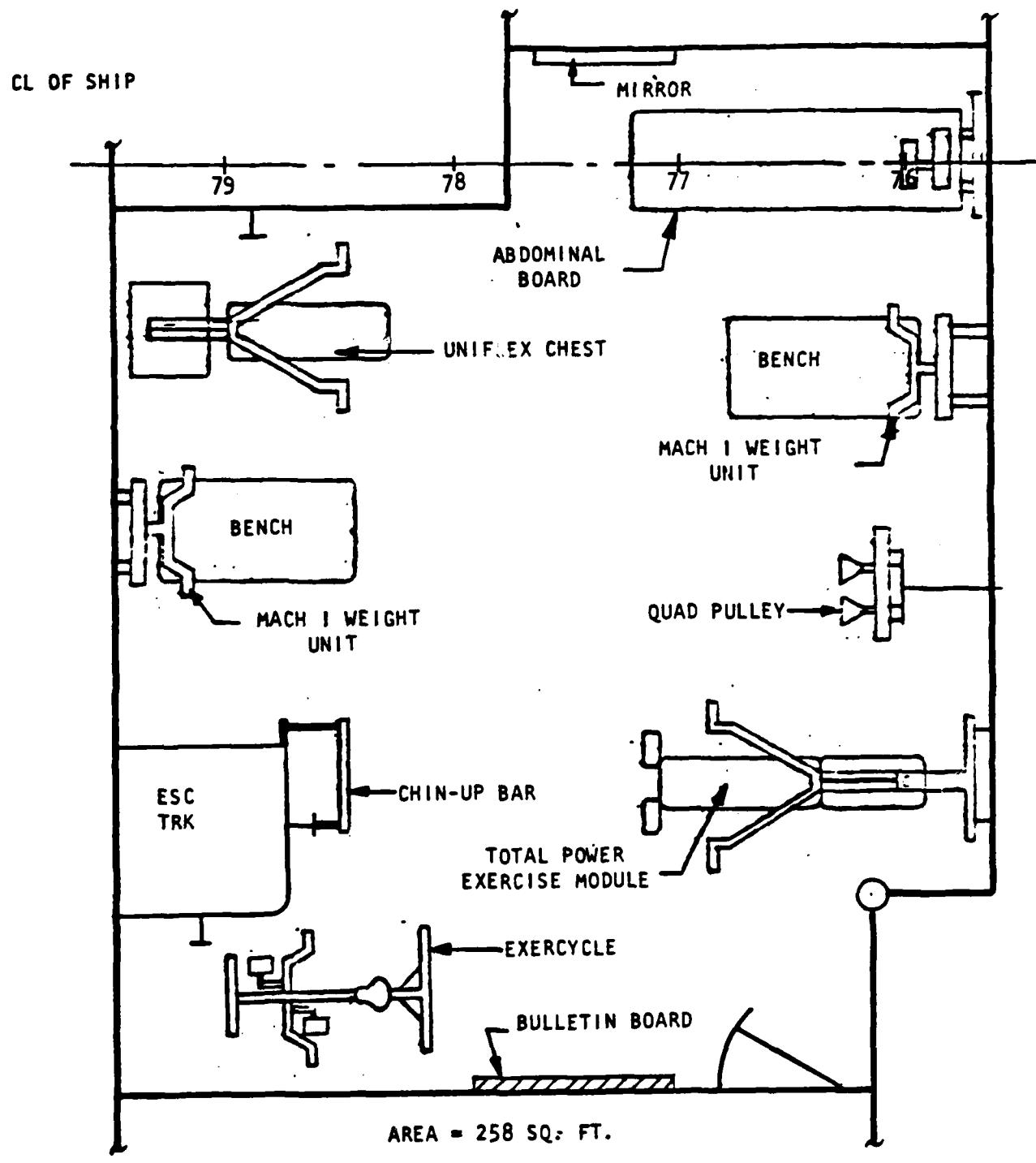


FIGURE 22

APPENDIX A

AD 37 CONVERSION

SPACES REMOVED FROM SHIP

<u>SPACE</u>	<u>COMPT NO.</u>	
FLAG QUARTERS		02 LVL
LEGAL OFFICE	01-53-2-Q	01 LVL
ADMIN OFFICE	01-57-6-Q	01 LVL
S-5 OFFICE	01-49-2-L	01 LVL
WEAPONS OFFICE	01-51-2-Q	01 LVL
SENIOR WATCH OFFICE	01-55-2-Q	01 LVL
SHIP ENTERTAINMENT	2-52-2-A	2ND DK
EQUIP RM		
SD STRM	3-38-6-A	3RD DK
SD STRM	3-38-4-A	3RD DK
E&A DIV OFFICE	3-41-2-Q	3RD DK
VENDING MACH RM	3-44-2-Q	3RD DK
FOLDING CHAIR STRM	3-44-1-A	3RD DK
CHAPLAIN OFFICE #1	4-76-0-Q	4TH DK
CHAPLAIN OFFICE #2	4-78-1-Q	4TH DK
CHAPLAIN VEST	4-76-1-Q	4TH DK

APPENDIX B

AD 37 CONVERSION

COST ESTIMATE

JOINER WORK

LABOR (\$15.00/HR) 2,571,300 (Includes 100% yard overhead)

MATERIAL
SUB TOTAL 1,250,760 (Includes 5% handling)
3,822,060

MECHANICAL (PIPING, HVAC & ELECT)

LABOR (\$15.00/HR) 223,000 (Includes 100% yard overhead)

MATERIAL
SUB TOTAL 89,250 (Includes 5% handling)
312,250

TOTAL JOINER &
MECHANICAL = 4,134,310
PROFIT (10%) 413,431
4,547,741

G&A (15%) 682,162
5,229,903

ENGINEERING -
3600 HRS
@\$30.00/HR 108,000
5,337,903

TOTAL ESTIMATED COST OF CONVERSION = \$5,338,000.00

**AD 37 CONVERSION
COST ESTIMATE (IN THOUSANDS OF DOLLARS)**

1. JOINER WORK

<u>Installations</u>	<u>Material</u>	<u>Labor</u>
(a) M.J. Bulkhead = 1,990 L.F.	133.0	212.5
(b) Sheathing (Bulkhead) = 720 L.F.	32.4	43.2
(c) Sheathing (Overhead) = 5,480 Sq. Ft.	43.8	411.0
(d) Deck Tile = 17,618 Sq. Ft.	70.5	52.9
(e) Ceramic Tile = 1,961 Sq. Ft.	4.9	29.4
(f) Carpet = 1,344 Sq. Ft.	4.7	1.0
(g) Furniture (Ship Officers, CPO & Crew)	580.5	79.0
(h) Laundry Equipment	5.0	.9
(i) Physical Fitness Equipment	5.0	.7
(j) Food Service and Messing Equipment	93.4	52.3
(k) Joiner Doors - 162	97.3	9.7
(l) Misc Bulkhead Mtd Equipment	2.5	5.2
(m) MJB CRES (Sanitary) = 1136 L.F.	113.6	136.3
(n) Fixed Lights	1.0	0.25
(o) Paint	3.6	12.6
	\$1191.2	\$1046.95

Ripout & Removals

(q) MJB = 1,080 L.F.	129.6
(r) Sheathing (Overhead) = 1,663 Sq. Ft.	5.0
(s) Sheathing (Bulkhead) = 196 L.F.	8.8
(t) Deck Covering = 20,850 Sq. Ft.	47.0
(u) Furniture & Plumbing Fixtures	46.5
(v) MJ Doors - 42	1.8
	\$238.7

2. MECHANICAL WORK

<u>Installations</u>	<u>Material</u>	<u>Labor</u>
(a) .75 Dia. Pipe = 1,840 L.F.	8.3	8.3
(b) 1 1/2" Dia. Pipe = 632 L.F.	5.7	5.7
(c) 3" Dia. Pipe = 805 L.F.	14.5	14.5
(d) 3" Duct = 219 L.F.	1.3	1.3
(e) 4" Duct = 615 L.F.	4.9	4.9
(f) 6" Duct = 575 L.F.	6.9	6.9
(g) 8" Duct = 1,092 L.F.	17.5	17.5
(h) Electric Cable = 2,300 L.F.	6.9	6.9
(i) Fans (3 provided)	8.0	.6
(j) Cooling Coils (2 provided)	11.0	.5
	\$85.0	\$67.1

AD 37 CONVERSION
COST ESTIMATE (IN THOUSANDS OF DOLLARS)

Ripout & Removals

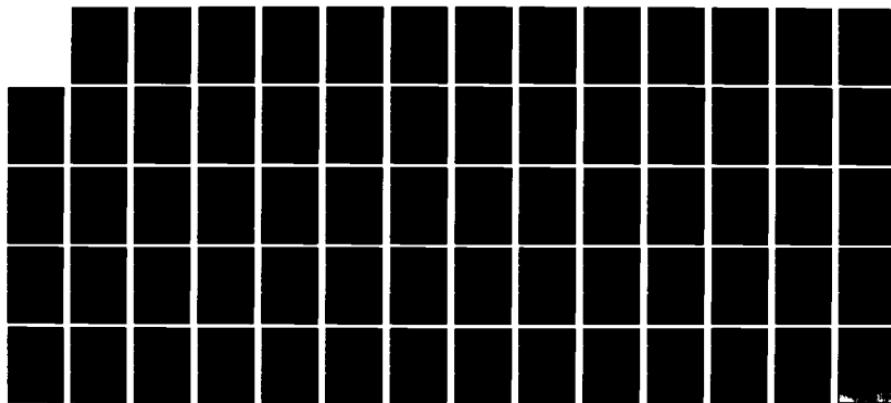
	<u>Labor</u>
(k) 3/4" Dia. Pipe = 948 L.F.	4.3
(l) 1 1/2" Dia. Pipe = 610 L.F.	5.5
(m) 3" Dia. Pipe = 230 L.F.	4.0
(n) 3" Duct = 60 L.F.	.4
(o) 4" Duct = 287 L.F.	2.3
(p) 6" Duct = 287 L.F.	3.4
(q) 8" Duct = 1,092 L.F.	17.5
(r) Electric Cable = 2,300 L.F.	7.0
	<u>\$44.4</u>

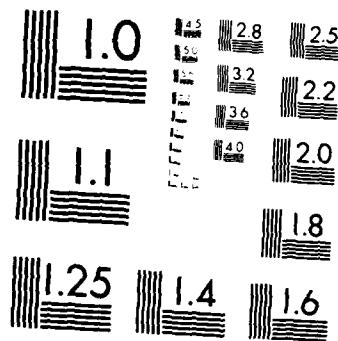
APPENDIX F
UNREP SHIPS-NOTIONAL OPERATION SCHEDULES

**NAVY MILITARY MANNING
AE-26 CLASS
EMPLOYMENT CYCLE
(36 MONTHS)**

CSL	CONSOLIDATE CARGO
ENR	ENROUTE
FFL	FLEET EXERCISE
FLV	LEAVE & UPKEEP
KP	LOAD CARGO
LOAD	OFF LOAD CARGO
OFF	OFF PORT VISIT
POM	PREPARATION FOR OVERSEAS MOVEMENTS
PV	REFRESHER TRAINING
PV	RESTRICTED AVAILABILITY
REFRA	READY FOR SEA PERIOD
RA	REGULAR OVERHAUL
RAFS	SERVICES
RO	TENDER AVAILABILITY
RSV	TYPE TRAINING
RTOR	UPKEEP PERIOD

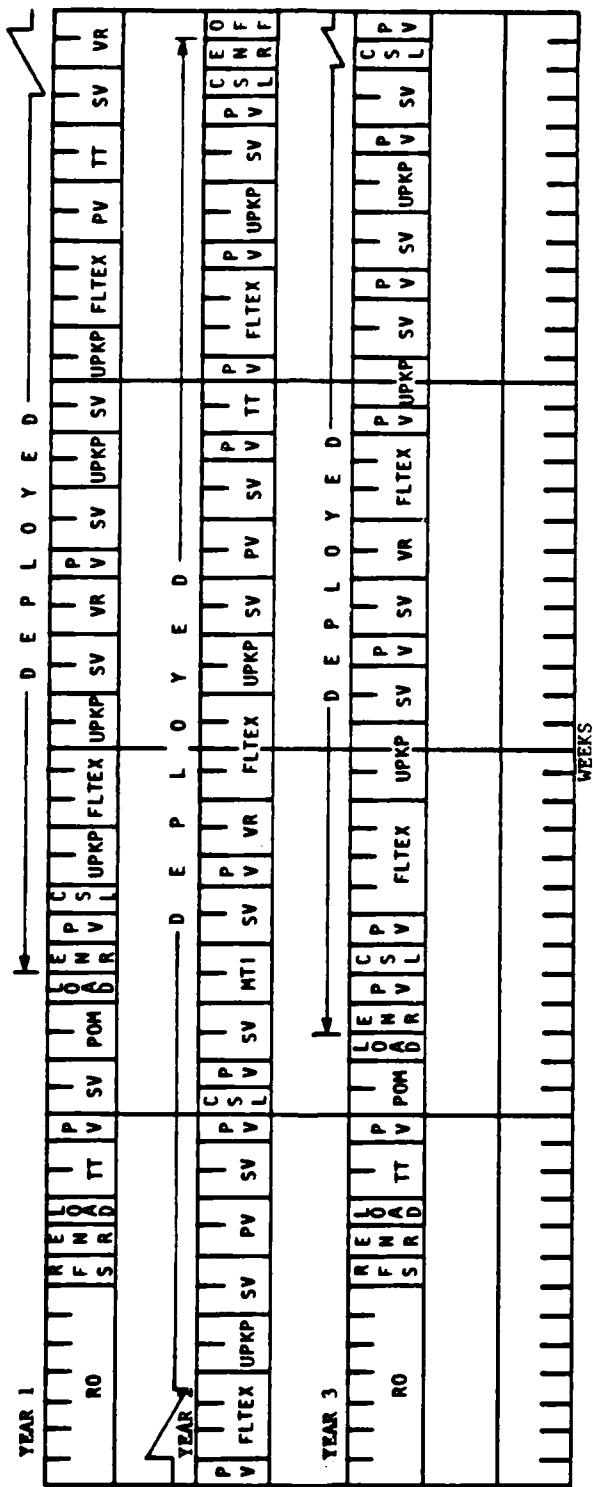
AD-A129 948 CIVILIAN MANNING OF AE AFS AND AD TYPE SUPPORT SHIPS 2/2
VOLUME II APPENDICES. (U) INFORMATION SPECTRUM INC
ARLINGTON VA A S RHODE ET AL 85 APR 83
UNCLASSIFIED ISI-V-2514-82-VOL-2 N00014-79-C-0040 F/G 15/5 NL





MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS 1963 A

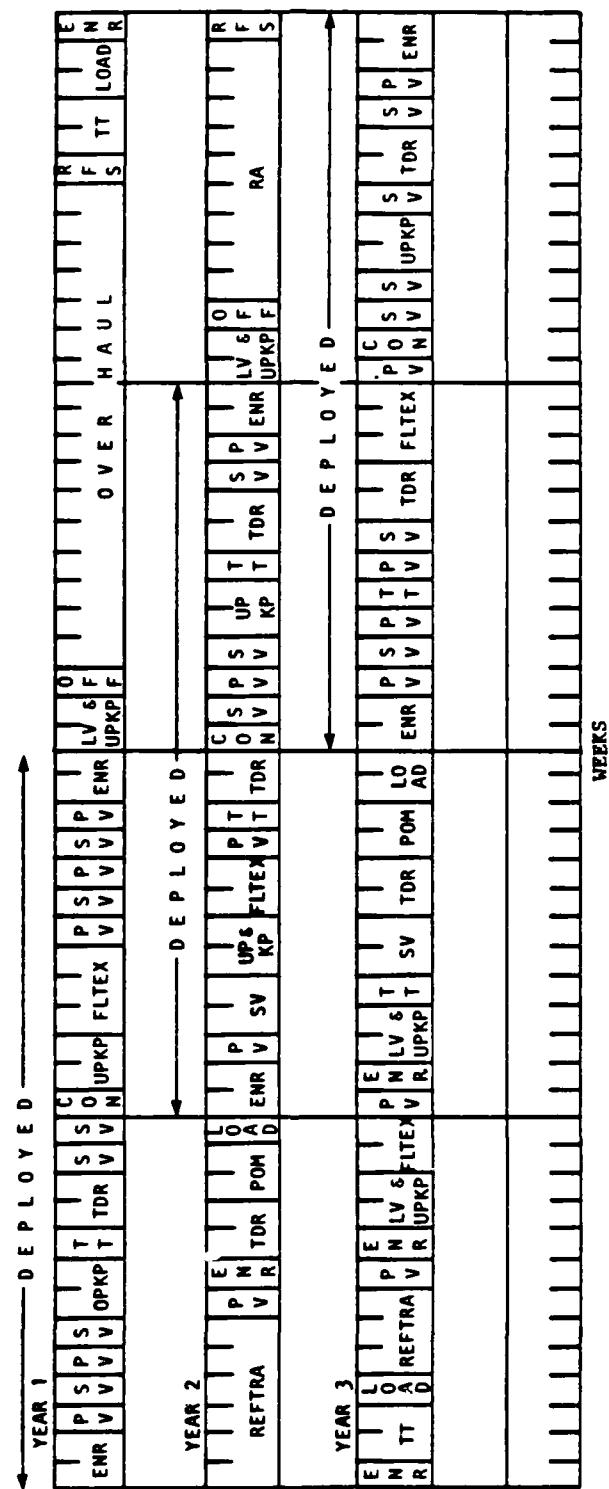
CIVILIAN MANNING
TAE-26 CLASS
EMPLOYMENT CYCLE
(36 MONTHS)



CSL
ENR
FLTEX
LOAD
OFF
MTI
POM
PV
RFS
RO
TT
SV
UPKP
VR

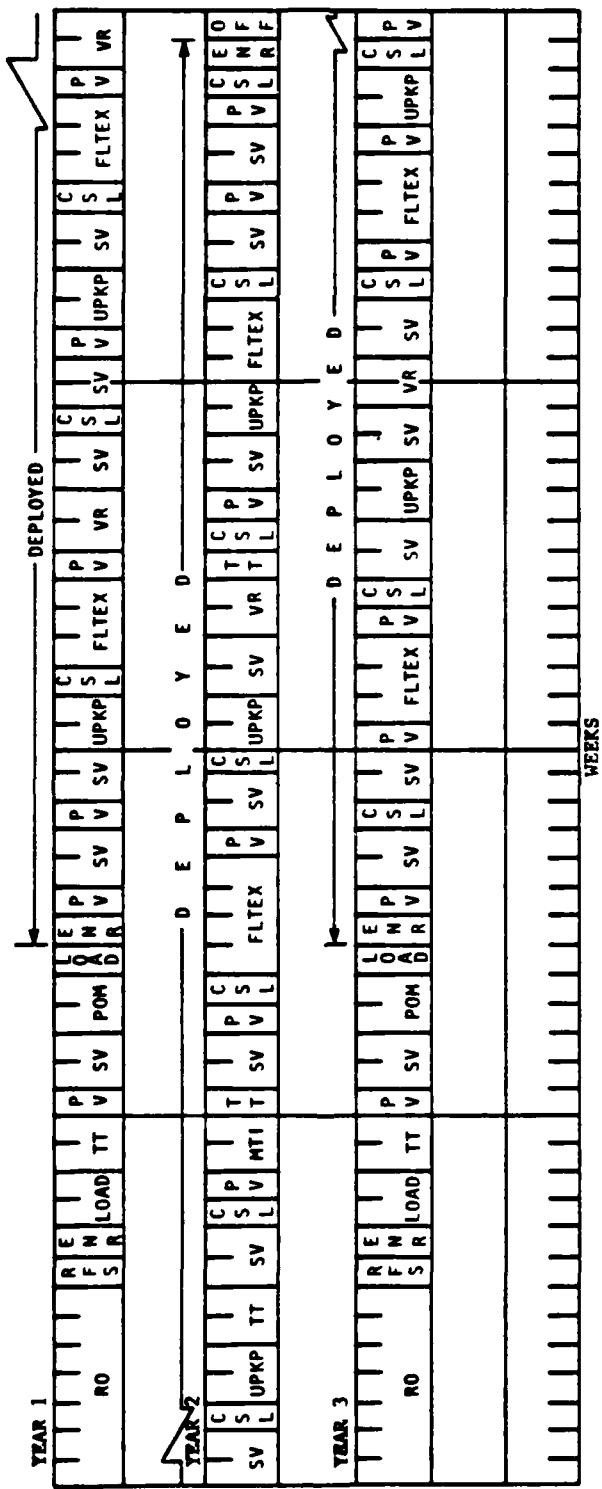
CONSOLIDATE CARGO
ENROUTE
FLEET EXERCISE
LOAD CARGO
OFF LOAD CARGO
MIDTERM INSPECTION
PREPARATION FOR OVERSEAS MOVEMENT
PORT VISIT
READY FOR SEA PERIOD
REGULAR OVERHAUL
TYPE TRAINING
SERVICES
UPKEEP PERIOD
VOYAGE REPAIRS

NAVY MILITARY MANNING
AFS-1 EMPLOYMENT CYCLE
(36 MONTHS)



CON.	CONSOLIDATE CARGO
ENR	ENROUTE
FLT	FLEET EXERCISE
LVUPKP	LEAVE & UPKEEP
LOAD	LOAD CARGO
OFF	OFF LOAD CARGO
POM	PREPARATION FOR OVERSEAS MOVEMENT
PV	PORT VISIT
	REFRESHER TRAINING
	RESTRICTED AVAILABILITY
	READY FOR SEA PERIOD
	REGULAR OVERHAUL
	SERVICES
	TENDER AVAILABILITY
	TYPE TRAINING
	TT
	UPKP

**CIVILIAN MANNING
TAFS-1 CLASS
EMPLOYMENT CYCLE
(36 MONTHS)**



CSL	CONSOLIDATE CARGO
ENR	ENROUTE
FLTEx	FLEET EXERCISE
LOAD	LOAD CARGO
MTI	OFF LOAD CARGO
POM	MIDTERM INSPECTION
PV	PREPARATION FOR OVERSEAS MOVEMENT
RFS	PORT VISIT
RO	READY FOR SEA PERIOD
SV	REGULAR OVERHAUL
TT	SERVICES
VR	TYPE TRAINING
UPKP	VOYAGE REPAIRS
	UPKEEP PERIOD

SUMMARY OF REPLENISHMENT SHIP NOTIONAL EMPLOYMENTS
BY MISSION AREAS
3-YEAR OPERATING CYCLE
(WEEKS)

<u>MISSION AREA</u>		<u>SHIP CLASS</u>			
		<u>AE-26</u>	<u>TAE-26</u>	<u>AFS-1</u>	<u>TAFS-1</u>
CONSOLIDATED CARGO	CONSOL	4	5	3	14
ENROUTE	ENR	9	5	17	5
FLEET EXERCISES	FLEX	19	23	11	19
LEAVE & UPKEEP	LV&UKP	8		8	
LOAD CARGO	LOAD	4	4	5	6
MID-TERM INSP.	MID.		2		2
OFF LOAD CARGO	OFF LD	1	1	2	1
PREPARATION FOR OVERSEAS MOVEMENT	POM	4	4	4	4
PORT VISITS	PV	15	25	17	19
REFRESHER TRAINING	REFTRA	7		9	
RESTRICTED AVAILABILITY	RA	9		9	
READY FOR SEA	RFS	4	2	2	2
REGULAR OVERHAUL	RO	39	14	17	14
SERVICES	SV	12	34	19	40
TENDER AVAILABILITY	TA	8		14	
TYPE TRAINING	TT	7	8	9	8
VOYAGE REPAIRS	VR		8		8
UPKEEP	UPKP	<u>6</u>	<u>21</u>	<u>10</u>	<u>14</u>
TOTAL WEEKS		156	156	156	156

APPENDIX G
NAVY MILITARY MANPOWER
FYDP COST CALCULATIONS

NAVY MILITARY MANNING
AE-26 DIRECT MPN ANNUAL FYDP COST

<u>PAY GRADE</u>	<u>CREW SIZE*</u>	<u>COMPOSITE STANDARD MILITARY RATE</u>	<u>TOTAL COST</u>
O-6	-	-	-
O-5	1	\$51,981	\$51,981
O-4	1	43,979	43,979
O-3	5	37,559	187,795
O-2	3	29,163	87,489
O-1	4	22,496	89,984
W-4	1	39,865	39,865
W-3	1	33,655	33,655
W-2	2	30,027	60,054
E-9	1	34,981	34,981
E-8	2	30,130	60,260
E-7	19	26,098	495,862
E-6	28	21,905	613,340
E-5	48	18,091	868,368
E-4	83	15,352	1,274,216
E-3	193	13,059	2,520,387
TOTAL DIRECT MPN COST			<u>\$6,462,216</u>

These costs were effective 4 February 1982

*Based on OPNAVINST 5300.121A dated 6 January 1981

**NAVY MILITARY MANNING
AFS-1 DIRECT MPN ANNUAL FYDP COST**

<u>PAY GRADE</u>	<u>CREW SIZE*</u>	<u>COMPOSITE STANDARD MILITARY RATE</u>	<u>TOTAL COST</u>
O-6	1	\$61,793	\$61,793
O-5	2	51,981	103,962
O-4	2	43,979	87,958
O-3	5	37,559	187,795
O-2	5	29,163	145,815
O-1	5	22,496	112,480
W-4	-	\$39,865	-
W-3	1	33,655	\$33,655
W-2	2	30,027	60,054
E-9	2	\$34,981	\$69,962
E-8	2	30,130	60,260
E-7	18	26,098	469,764
E-6	39	21,905	854,295
E-5	62	18,091	1,121,642
E-4	88	15,352	1,350,976
E-3	201	13,059	<u>2,624,859</u>
TOTAL DIRECT MPN COST			\$7,345,270

These costs were effective 4 February 1982

*Based on OPNAVINST 5320.228A dated 6 June 1980

NAVY MILITARY MANNING
AD-37 DIRECT MPN ANNUAL FYDP COST

<u>PAY GRADE</u>	<u>CREW SIZE*</u>	<u>COMPOSITE STANDARD MILITARY RATE</u>	<u>TOTAL COST</u>
0-6	1	\$ 61,793	\$ 61,793
0-5	5	51,981	259,905
0-4	5	43,979	219,895
0-3	12	37,559	450,708
0-2	3	29,163	87,489
0-1	7	22,496	157,472
W-4	2	\$ 39,865	\$ 79,730
W-3	3	33,655	100,965
W-2	6	30,027	180,162
E-9	10	\$ 34,981	\$ 349,810
E-8	23	30,130	692,990
E-7	101	26,098	2,635,898
E-6	197	21,905	4,315,285
E-5	278	18,091	5,029,298
E-4	354	15,352	5,434,608
E-3	398	13,059	<u>5,197,482</u>
TOTAL DIRECT MPN COST			\$ 25,253,490

These costs were effective 4 February 1982

*Based on OPNAVINST 5320.434 (DRAFT)

NAVY MILITARY MANNING
TAD-37 DIRECT MPN ANNUAL FYDP COST - REPAIR CREW

<u>PAY GRADE</u>	<u>CREW SIZE</u>	<u>COMPOSITE STANDARD MILITARY RATE</u>	<u>TOTAL COST</u>
0-5	1	\$ 51,981	\$ 51,981
0-4	3	43,979	131,937
0-3	3	37,559	112,677
0-2	2	29,163	58,326
W-4	2	39,865	79,730
W-3	1	33,655	33,655
W-2	3	30,027	90,081
E-9	8	34,981	279,848
E-8	20	30,130	602,600
E-7	88	26,098	2,296,624
E-6	162	21,905	3,548,610
E-5	235	18,091	4,251,385
E-4	270	15,352	4,145,040
E-3	244	13,059	<u>3,186,396</u>
TOTAL DIRECT MPN COST			\$ 18,868,890

These costs were effective 4 February 1982

*Based on OPNAVINST 5320.434 (DRAFT)

APPENDIX H
NAVY MILITARY MANPOWER
ECONOMIC COST CALCULATIONS

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - OFFICERS
 AFS-1
 (FY81\$)

<u>RANK</u>	<u>DESIGNATION</u>	<u>FY81\$</u>
		<u>BILLET COST</u>
CAPT	1110	\$ 49,325
LT	4100	30,543
CDR	1110	43,953
LTJG	1110	24,217
LT	2100	48,269
LCDR	1110	37,764
LTJG	1110	24,217
LTJG	1110	24,217
LT	6110	40,151
LTJG	1110	24,217
WO3	7110	33,264
ENS	1110	24,400
LCDR	1110	37,764
WO2	7130	28,120
WO2	7130	28,120
ENS	1110	24,400
LTJG	1110	24,217
CDR	3100	43,014
LT	3100	30,656
LT	3100	30,656
ENS	3100	19,636
ENS	3100	19,636
ENS	3100	<u>19,636</u>
TOTAL ECON COST TO DOD - OFFICERS		\$710,392

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL
AFS-1
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR	TOTAL
AK								
Rating Total	1		1	4	7	9	18	40
BM			\$22,788	\$17,802	\$14,793	\$13,932		
Rating Total	1	\$24,800	\$91,152	\$124,614	\$133,137	\$250,776	/	\$34,893
BT			2	1	5	7	4	19
Rating Total		\$26,362	\$17,654	\$14,908	\$13,885			
		\$52,724	\$23,176	\$88,270	\$104,356	\$55,540		\$324,066
DK				1		1	1	2
Rating Total			\$22,873			\$14,656		\$ 37,529
DP			1	1	1	3	4	10
Rating Total		\$25,347	\$23,128	\$17,283	\$15,253	\$14,145		
DS				1			1	
Rating Total				\$22,548			\$ 22,548	
EM			1	2	3	6	3	15
Rating Total		\$25,521	\$22,344	\$19,096	\$19,202	\$17,124		
		\$44,68b	\$57,288	\$115,212	\$51,372	\$294,081		
EN				1	1	1	3	
Rating Total			\$22,946	\$17,204	\$15,029			\$ 55,179
ET			1	3	3		7	
Rating Total		\$23,394	\$22,872	\$22,867				\$160,611

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT'D)
AFS-1
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESC STKR E-3	TOTAL
FN Rating Total							30 \$13,591	30 \$407,730
GN Rating Total	1	1		2	2	2	3 \$19,169	9 \$177,653
	\$25,516	\$22,680	\$18,130 \$36,260	\$17,845 \$35,690	\$17,845 \$35,690	\$17,845 \$35,690	\$57,507	
HM Rating Total	1		1	1	1	1	3 \$29,154	3 \$57,358
	\$25,175			\$17,257	\$14,926	\$14,926		
HN Rating Total							1 \$13,306	1 \$13,306
HT Rating Total	1	2	2	4	4	4	2 \$14,577	11 \$197,296
	\$25,558	\$22,642 \$45,284	\$17,644 \$35,288	\$15,503 \$62,012	\$15,503 \$62,012	\$15,503 \$62,012	\$29,154	
IC Rating Total		1	2	2	2	2	7 \$34,542	7 \$131,267
	\$22,417	\$19,016 \$38,032	\$18,138 \$36,276	\$17,271 \$34,542	\$17,271 \$34,542	\$17,271 \$34,542		
JO Rating Total				1	1	1	1 \$16,164	1 \$16,164
MA Rating Total	1 \$24,494						1 \$24,494	
MM Rating Total	3 \$25,827 \$77,481	4 \$22,723 \$90,892	9 \$19,592 \$176,328	14 \$19,035 \$266,490	2 \$18,283 \$36,566	2 \$18,283 \$36,566	32 \$647,757	
MR Rating Total				1 \$17,619			1 \$17,619	

**ANNUAL MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT'D)**
AFS-1 (FY81\$)

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONTD)
 AFS-1
 (FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESC STKR E-3	TOTAL
SM			1	1	2	3	1	8
Rating Total		\$26,334	\$24,011	\$17,562	\$15,312	\$14,714	\$146,119	
SN							101	101
Rating Total							\$12,390	
							\$1,251,390	\$1,251,390
YN			1		1	3	5	
Rating Total			\$22,182		\$16,071	\$15,869	\$47,607	\$85,860
TOTAL ENLISTED & OFFICER ANNUAL ECONOMIC (BILLET) COST TO DOD (FY81\$)								
								\$7,533,615

LEGEND

of Billets
 Billet Cost/Man ³ \$15,253
 Total Economic (Billet)
 Cost to DOD (FY81\$) \$45,759

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - OFFICERS
 AE-26
 (FY81\$)

<u>RANK</u>	<u>DESIGNATION</u>	<u>FY81\$</u> <u>BILLET COST</u>
CDR	1110	\$ 43,953
LCDR	1110	37,764
LTJG	1110	24,217
LT	2100	48,269
LT	1110	29,631
LTJG	1110	24,217
ENS	1110	24,400
LT	6110	40,151
LTJG	1110	24,217
ENS	1140	17,781
WO4	7110	36,403
WO3	7160	33,264
LT	6130	40,151
ENS	1110	24,400
WO2	7130	28,120
WO2	7130	28,120
LT	3100	30,656
ENS	3100	<u>19,636</u>
TOTAL ECON COST TO DOD - OFFICERS		\$ 555,350

**ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL
AE-26 (FY81\$)**

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR	TOTAL
BN								49
Rating Total	1	1	1	5	8	11	22	
	\$31,552	\$28,282	\$24,800	\$22,788	\$17,802	\$14,793	\$13,932	
BT								217
Rating Total		2	1	4	6	4	17	
	\$26,362	\$52,724	\$23,176	\$17,654	\$14,908	\$13,885	\$55,540	\$291,504
DK								217
Rating Total		1	1	1	1	1	1	
	\$22,873							
EM								2
Rating Total	1	2	3	6	6	2	14	
	\$25,521	\$22,344	\$19,096	\$19,202	\$17,124	\$34,248	\$276,957	
EN								14
Rating Total	1	2	3	6	6	2	14	
	\$25,676	\$44,688	\$57,288	\$115,212	\$115,212	\$115,212	\$115,212	
ET								3
Rating Total		1	1	1	1	1	1	
	\$25,676							
FN								6
Rating Total		1	3	2	2	2	6	
	\$23,394	\$22,872	\$22,867	\$22,867	\$22,867	\$22,867	\$22,867	
GMG								26
Rating Total	1	1	3	6	6	5	26	
	\$25,516	\$22,690	\$18,130	\$17,845	\$17,845	\$19,169	\$19,169	
HM								16
Rating Total		1	1	2	2	2	3	
	\$25,175							
HT								11
Rating Total	1	2	2	4	4	2	2	
	\$25,558	\$22,642	\$17,644	\$15,503	\$15,503	\$14,577	\$14,577	
		\$45,284	\$35,288	\$62,012	\$62,012	\$29,154	\$29,154	\$197,206

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AE-26
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR	TOTAL
							E-3	
IC Rating Total		1			\$19,016 \$38,032	\$18,138 \$36,276	1	6
JO Rating Total		\$26,674					1	1
MR Rating Total						\$16,164		\$ 16,164
MM Rating Total		\$24,494						\$ 24,494
MR Rating Total		3	4		6	16	2	33
MM Rating Total	\$25,827 \$77,481	\$22,723 \$90,892	\$19,592 \$156,736		\$19,035 \$304,560	\$18,283 \$36,566		\$6666,235
MR Rating Total					1			1
MS Rating Total	1	2	3		4	3	3	13
OS Rating Total	\$26,440	\$24,104 \$48,203	\$20,688 \$62,064		\$15,507 \$62,028	\$14,586 \$43,758		\$242,498
PC Rating Total		1	3		3	4	4	11
PM Rating Total		\$22,233	\$17,241 \$51,723		\$15,544 \$46,636	\$14,725 \$58,900		\$179,488
MM Rating Total		\$23,123			1	1	2	3
MM Rating Total		\$25,122			\$15,619	\$14,578	\$ 38,816	3
MM Rating Total		\$30,043						\$ 30,043

**NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AE-26
(FY81\$)**

**TOTAL ENLISTED AND
OFFICER ANNUAL ECONOMIC
(BILLET) COST TO DOD
(FY81\$)**

1

3	\$15,253	\$45,759
# of Billets		
Billet Cost/Man		
Total Economic		
(Billet) Cost		
to DOD (FY81\$)		

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - OFFICERS
 AD-37
 (FY81\$)

<u>RANK</u>	<u>DESIGNATION</u>	<u>FY81\$ BILLET COST</u>
CAPT	1110	49,325
CDR	1110	43,953
CDR	4100	42,825
LT	4100	30,543
ENS	6410	32,527
LT	1110	29,631
LCDR	2100	40,169
LT	2100	48,269
LT	2300	31,065
CDR	2200	47,245
LCDR	2200	37,604
LT	2200	29,900
LT	2200	29,900
LT	1110	29,631
ENS	1160	24,400
WO2	7120	28,120
LT	6110	40,151
LTJG	1110	24,217
ENS	1160	24,400
ENS	1160	24,400
WO2	7110	28,120
LT	6130	40,151
WO3	7130	33,264
WO3	7130	33,264
WO2	7140	28,120

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - OFFICERS (CONT)
 AE-37
 (FY81\$)

<u>RANK</u>	<u>DESIGNATION</u>	<u>FY81\$ BILLET COST</u>
CDR	3100	43,014
LCDR	3100	35,982
LCDR	3100	35,982
ENS	3100	19,636
ENS	3100	19,636
ENS	6510	34,527
CDR	1440	45,625
LT	6130	40,151
LT	6150	40,151
LT	6150	40,151
LTJG	6130	34,427
LTJG	6130	34,427
WO4	7140	36,403
WO4	7140	36,403
WO2	7130	28,120
WO2	7160	28,120
WO2	7180	28,120
LCDR	1110	37,764
WO3	7170	<u>33,264</u>
TOTAL ECON COST TO DOD - OFFICERS		<u>1,505,097</u>

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL
 AD-37
 (FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESC STKRS E-3	TOTAL
BU Rating Total	\$30,721	\$29,377	\$26,362 \$158,172	\$23,176 \$208,534	\$17,802 \$229,502	\$14,793 \$221,875	\$13 \$131,116	49 \$846,745
BT Rating Total								
DK Rating Total								
DN Rating Total								
DP Rating Total								
DS Rating Total								
UT Rating Total								

ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AD-37
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 POC	E-6 PO1	E-5 PO2	E-4 PO3	DESC STKR E-3	TOTAL
EN Rating Total	\$31,839	2	8	14	22	19	11	24
EN Rating Total	\$31,839	\$29,522	\$22,521	\$22,344	\$19,096	\$19,202	\$17,124	\$1,557,181
EN Rating Total	\$31,839	\$59,044	\$130,163	\$312,316	\$420,112	\$364,338	\$138,364	\$1,557,181
ER Rating Total	2	1	3	3	7	8	2	24
ER Rating Total	\$31,093	\$30,359	\$27,118	\$23,394	\$17,204	\$15,029	\$13,729	\$1,443,067
ER Rating Total	\$31,093	\$60,718	\$325,416	\$444,486	\$120,428	\$120,232	\$27,458	\$1,443,067
ER Rating Total	\$31,093	\$62,186	\$325,416	\$444,486	\$686,160	\$663,143	\$159,352	\$2,401,461
ET Rating Total	2	2	12	19	30	29	3	102
ET Rating Total	\$27,900	\$27,900	\$27,900	\$27,900	\$22,872	\$22,867	\$19,919	\$1,313,327
ET Rating Total	\$27,900	\$55,400	\$55,400	\$55,400	\$55,400	\$55,400	\$55,400	\$555,800
ETC Rating Total	2	2	4	7	6	4	23	23
ETC Rating Total	\$24,914	\$21,340	\$18,656	\$18,091	\$17,391	\$17,391	\$69,564	\$443,893
ETC Rating Total	\$24,914	\$49,328	\$85,360	\$130,592	\$108,546	\$108,546	\$69,564	\$443,893
ETC Rating Total	\$24,914	\$52,092	\$71,046	\$91,610	\$81,210	\$81,210	\$60,588	\$356,546
ETC Rating Total	\$24,914	\$26,046	\$23,682	\$18,322	\$16,5	\$16,5	\$15,147	19
ETC Rating Total	\$24,914	\$52,092	\$71,046	\$91,610	\$81,210	\$81,210	\$60,588	\$356,546

**NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AD-37 (FY81\$)**

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AD-37
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKRS	TOTAL
							E-3	
LI Rating Total		\$25,078	1	\$22,252	3	2	2	9
MA Rating Total		\$24,494	1	\$23,016	1	2	2	9
ML Rating Total		\$25,299	1	\$29,967	3	3	3	11
MM Rating Total	2	2	14	36	29	49	26	158
MR Rating Total	\$30,816 \$61,632	\$30,043 \$60,086	\$25,827 \$361,378	\$22,723 \$18,028	\$19,592 \$568,168	\$19,035 \$932,715	\$18,283 \$475,358	\$5,277,565
MS Rating Total	1	1	8	13	24	21	13	81
OM Rating Total	\$30,643	\$23,248	\$204,576	\$22,368 \$290,784	\$17,619 \$422,856	\$14,973 \$314,433	\$13,339 \$173,407	\$1,464,947
OS Rating Total	1	2	4	5	8	6	6	26
	\$29,395	\$52,880	\$26,440 \$96,416	\$24,104 \$103,440	\$20,683 \$124,056	\$15,507 \$87,516	\$14,586 \$493,703	
	\$25,153	\$45,344						
	1	2	4	3	3	3	3	13
	\$22,213	\$34,482	\$22,672 \$76,244	\$19,061 \$51,657	\$17,219 \$45,558	\$15,136 \$243,956		
	1	2	1	2	1	2	2	6
	\$22,213	\$34,482	\$22,672 \$76,244	\$19,061 \$51,657	\$17,219 \$45,558	\$15,136 \$243,956		

ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
AD-37
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1 /	E-5 PO2	E-4 PO3	DESG STKR	TOTAL
PC Rating Total			\$23,123	1	\$15,693	\$15,473	\$54,289	3
PI Rating Total	\$25,399	\$23,083	\$13,090	1	\$15,978	\$15,064	\$98,214	5
PM Rating Total	\$25,555	\$23,300	\$18,253	2	\$18,276	2	7	7
PN Rating Total	\$25,122	\$22,394	\$17,798	1	\$15,619	\$14,578	\$139,489	9
PO Rating Total	\$30,816 \$61,632	\$30,043 \$60,086	\$22,723 \$45,446	2	\$19,592 \$78,368	4	4	10
2 ¹ Rating Total			\$21,262	1	\$15,739	\$14,977	\$85,316	5
2 ¹ Rating Total	\$25,391 \$51,782	\$23,073 \$69,234	\$18,224 \$72,896	3	\$16,000 \$96,000	6	4	19

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONTR)
AD-37
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR E-3	TOTAL
	RF Rating Total			\$21,327		\$15,334		\$37,161
SH				1	1	3	6	2
Rating Total		\$24,990	\$22,959		\$18,806 \$56,658	\$16,178 \$97,068	\$15,921 \$31,842	\$233,517
SK				6	3	7	4	13
Rating Total		\$28,096	\$137,346		\$18,664 \$55,992	\$16,237 \$113,659	\$15,315 \$63,260	\$398,353
SI				1	1	3	2	7
Rating Total		\$24,011	\$17,562		\$15,312 \$45,936	\$14,714 \$29,428	\$116,937	
SN							\$12,390	\$1,263,730
Rating Total							\$1,263,780	
STG								8
Rating Total				1	1	2	4	
TH								
Rating Total	2 \$29,343 \$53,630	2 \$26,852 \$53,704	4 \$24,155 \$96,620	7 \$18,606 \$130,242	7 \$16,617 \$116,319	7 \$14,618 \$73,090	5 \$155,610	27 \$528,655

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
 AD-37
 (FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR	TOTAL
YN							E-3	
Rating Total		\$24,995 \$49,990	\$22,132 1	\$18,399 \$91,995	\$16,071 \$80,355	\$15,869 \$111,383	7 20	\$355,605
								\$26,545,171

TOTAL ENLISTED AND
 OFFICER ANNUAL ECONOMIC
 (BILLET) COST TO DOD
 (FY81\$)

LEGEND

of Billets 3
 Billet Cost/Man \$15,253
 Total Economic
 (Billet) Cost
 (FY81\$) \$45,759

NAVY MILITARY MANNING REPAIR CREW - OFFICERS
 ANNUAL ECONOMIC COST TO DOD - REPAIR CREW
 TAD-37
 (FY81\$)

<u>RANK</u>	<u>DESIGNATION</u>	<u>FY81\$ BILLET COST</u>
LCDR	3100	35,982
LCDR	3100	35,982
CDR	1440	45,625
LT	6130	40,151
LT	6150	40,151
LT	6150	40,151
LTJG	6130	34,427
LTJG	6130	34,427
WO4	7140	36,403
WO4	7140	36,403
WO2	7130	28,120
WO2	7160	28,120
WO2	7180	28,120
LCDR	1110	37,764
WO3	7170	<u>33,264</u>
TOTAL ECON COST TO DOD - OFFICERS		535,090

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL
TAD-37 REPAIR CREW
(FY81\$)

		E-9 MCPO			E-8 SCPO			E-7 CPO			E-6 PO1			E-5 PO2			E-4 PO3			DESC STK/R E-3			TOTAL			
RATING																										
BM								4			4			9			12			9			38			
RATING TOTAL								24,800			22,788			17,802			14,793			13,932						
BT	1	1						5			6			10			10			125,516			125,388		653,474	
RATING TOTAL	30,721	29,377						26,362			23,176			17,654			14,908			13,885			5		38	
DK								131,810			139,056			176,540			149,080			64,425			726,009			
DM											1						1			14,656			29,312		67,790	
RATING TOTAL											22,873						15,605									
DP												2														
RATING TOTAL												21,212			16,853			14,267			28,534			120,607		
DS												42,424														
RATING TOTAL													1													
EM	1	1										25,347			23,128			17,283			15,253			14,145		
RATING TOTAL	31,839	29,522															34,566			45,759			70,725		199,525	
EN																	1									
RATING TOTAL																	22,548									22,548
ET																										
RATING TOTAL	31,093	30,359																								
FTG																										
RATING TOTAL	62,186	60,718																								

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
TAD-37 REPAIR CREW
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR E-3	TOTAL
FN							75	75
RATING TOTAL							13,591	1,019,325
FT	² 27,900 55,800						1,019,325	1,019,325
RATING TOTAL								55,800
GMT							2	
RATING TOTAL								
GSE							4	
RATING TOTAL								
GSM							95,974	
RATING TOTAL								
HT	1	⁴ 29,105 116,420	¹³ 25,558 332,254	²⁸ 22,642 6333,976	⁴³ 17,644 758,692	⁷⁴ 15,503 1,147,222	²⁸ 14,577 408,156	¹⁹¹ 3,428,276
RATING TOTAL	31,556							
IC	1	⁴ 29,745	^{26,674 80,022}	⁵ 22,417 112,085	¹⁰ 19,016 190,160	¹⁰ 18,138 181,380	⁴ 17,271 69,084	³³ 662,476
RATING TOTAL								
IM							7	32
RATING TOTAL								
LI							2	9
RATING TOTAL								
ML							3	11
RATING TOTAL								
FTM							1	2
RATING TOTAL							16,898	39,466

NAVY MILITARY MANNING
ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
TAD-37 REPAIR CREW
(FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG STKR E-3	TOTAL
MM	2	2	12	31	24	32	22	125
RATING TOTAL	30,816 61,632	30,043 60,086	25,827 309,924	22,723 704,413	19,592 470,208	19,035 609,120	18,283 402,226	2,617,609
MR	1	1	8	13	23	21	13	80
RATING TOTAL	30,643	28,248	25,572 204,576	22,368 290,784	17,619 405,237	14,973 314,433	13,339 173,407	1,447,328
OM		1	2	4	3	3	3	13
RATING TOTAL		25,153	22,672 45,344	19,061 76,244	17,219 51,657	15,186 45,558	14,447 243,956	
PH		1	1	1	1	1	1	5
RATING TOTAL		25,999	23,083	18,090	15,978	15,064	15,064	98,214
PM		1	1	2	2	1	1	7
RATING TOTAL		25,555	23,300	18,253 36,506	18,276 36,552	17,576	17,576	139,489
PO	2	30,043 60,086	22,723 45,446	19,592 78,368				8
RATING TOTAL								183,900
RM		1	1	1	1	1	1	5
RATING TOTAL		25,891	23,078	18,224	16,000	15,066	15,066	98,259
SK	1		6	3	7	4	4	21
RATING TOTAL	28,096		22,891 137,346	18,664 55,992	16,237 113,659	15,815 63,260	15,815 398,353	
SN							23	23
RATING TOTAL						12,390	12,390	
GMG	1	25,516	22,680	18,130	17,845 53,535	19,4	19,169	12
RATING TOTAL						76,676	76,676	232,797

NAVY MILITARY MANNING
 ANNUAL ECONOMIC COST TO DOD - ENLISTED PERSONNEL (CONT)
 TAD-37 REPAIR CREW
 (FY81\$)

RATING	E-9 MCPO	E-8 SCPO	E-7 CPO	E-6 PO1	E-5 PO2	E-4 PO3	DESG	STKR E-3	TOTAL
STG		1	1	2	4	4			8
RATING TOTAL		26,463	23,813	19,935	16,366				155,610
TM	29,340	26,852	24,155	18,606	7	7	5	27	
RATING TOTAL	58,680	53,704	96,620	130,242	116,319	116,319	73,090	528,655	
YN		1	1	4	4	4	2	12	
RATING TOTAL		24,995	22,182	18,399	16,071	15,869	31,738	216,795	
TOTAL ENLISTED AND OFFICER ANNUAL ECONOMIC (BILLET) COST TO DOD (FY81\$)									1027
									19,960,674

APPENDIX I
NAVY CIVIL SERVICE
MANPOWER COST CALCULATIONS

NAVY CIVIL SERVICE MANNING
 NECC TAE-26
 ANNUAL BASE WAGE COMPUTATIONS
 (FY82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Master (D)	\$57,500	\$57,500
2	First Officer (D)	37,986	75,972
1	Second Officer (W)	26,791	26,791
2	Third Officer (W)	23,904	47,808
2	Boatswain (D)	18,823	37,646
1	Carpenter (D)	16,991	16,991
6	Boatswain Mate (D)	15,450	92,700
9	Able Seaman (W)	12,961	116,649
45	Ordinary Seaman (D)	12,038	541,710
30	Able Seaman (D)	14,480	434,400
1	Chief Engineer (D)	57,500	57,500
1	1st Assistant Engineer (D)	37,986	37,986
2	2nd Assistant Engineer (D)	34,292	68,584
2	3rd Assistant Engineer (D)	30,598	61,196
3	3rd Assistant Engineer (W)	23,904	71,712
1	Chief Electrician (D)	20,761	20,761
4	2nd Electrician (D)	18,732	74,928
1	Refrigeration Engineer (D)	18,732	18,732
2	2nd Refrigeration Engineer (D)	16,111	32,222
4	Deck Engineer (D)	18,732	74,928
2	Machinist/Plumber (D)	17,177	34,354
3	Oiler (W)	12,961	38,883
3	F/WT (W)	12,961	38,883

NAVY CIVIL SERVICE MANNING
 NECC TAE-26
 ANNUAL BASE WAGE COMPUTATIONS (CONT)
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
3	Wiper (D)	\$12,038	\$36,114
4	Utilitymen (D)	14,965	59,860
1	Chief Steward (D)	18,823	18,823
1	2nd Cook (D)	13,403	13,403
1	Chief Cook (D)	15,137	15,137
1	Cook/Baker (D)	14,753	14,753
2	3rd Cook (D)	12,812	25,624
6	Messman (D)	10,048	60,288
12	Utilityman (D)	10,048	120,576
1	3rd Pantryman (D)	10,862	10,862
2	Laundryman (D)	10,596	21,192
1	Purser	31,047	31,047
1	Nurse	21,112	21,112
1	Supply Officer	30,083	30,083
1	Assistant Supply Officer	23,517	23,517
3	Yeoman/Storekeeper	14,815	<u>44,445</u>
	TOTAL BASE WAGE		\$2,625,672

NAVY CIVIL SERVICE MANNING
 NECC TAE-26
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.

(FY 82\$)

	<u>FYDP COST</u>	<u>ECONOMIC COST</u>
Total Base Pay	\$2,625,672	\$2,625,672
Overtime (37% Base Pay - CIVMAN)	971,499	971,499
Premium/Penalty Pay (7% Base Pay - CIVMAN)	183,797	183,797
Subsistence (\$5.50/Man/Day)	339,268	339,268
Other (Relief Officers, (6% Base Pay - CIVMAN)) Awaiting Assignment Training, Damage Control Instruction	157,540	157,540
Retirement ¹	183,797	535,637
Life & Health Insurance (3.7% of Base Pay)*	97,150	97,150
Workman's Compensation Bonuses and Awards & Unemployment Programs (1.9% of Base Pay)*	49,888	49,888
Shore Leave (10.5% of Base Pay)	275,696	275,696
Annual, Sick and (20% Base Pay CIVMAN/CIV77) Military Leave	525,134	525,134
Travel (2% Base Pay - AF-58 (CIVMAN))	52,513	52,513
Ammunition Bonus (10% Base Pay)	<u>262,567</u>	<u>262,567</u>
SUBTOTAL	5,724,521	6,076,361
MSC OVERHEAD (5% Subtotal)	<u>286,226</u>	<u>303,818</u>
TOTAL	\$6,010,747	\$6,380,179

1/ 7.0% Base Pay in FYDP Cost; 20.4% Base Pay in Economic Cost per OMB
 Circular A-76.

*Based on OMB Circular A-76.

NAVY CIVIL SERVICE MANNING
 NECC TAFS-1
 ANNUAL BASE WAGE COMPUTATIONS
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Master (D)	\$57,500	\$57,500
2	First Officer (D)	41,782	83,564
1	Second Officer (W)	29,470	29,470
2	Third Officer (W)	26,295	52,590
2	Boatswain (D)	20,703	41,406
1	Carpenter (D)	18,688	18,688
6	Boatswain Mate (D)	16,994	101,964
28	Able Seaman (D)	15,925	445,900
41	Ordinary Seaman (D)	13,242	542,922
9	Able Seaman (W)	14,257	128,313
1	Chief Engineer (D)	57,500	57,500
1	First Assistant Engineer (D)	41,782	41,782
2	Second Assistant Engineer (D)	37,719	75,438
2	3rd Assistant Engineer (D)	33,657	67,314
3	3rd Assistant Engineer (W)	26,295	78,885
4	Deck Engineer (D)	20,608	82,432
1	Electrician (D)	22,838	22,838
2	2nd Electricians (D)	20,608	41,216
3	Refrigeration Engineer (W)	17,721	53,163
3	Refrigeration Oiler (W)	14,257	42,771
1	Mechinist (D)	18,473	18,473
3	Utilityman (D)	16,462	49,386
3	Oiler (W)	14,257	42,771

NAVY CIVIL SERVICE MANNING
 NECC TAFS-1
 ANNUAL BASE WAGE COMPUTATIONS (CONT)
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
3	F/WT (W)	\$14,257	\$42,771
3	Wiper (D)	13,242	39,726
1	Chief Steward (D)	20,703	20,703
1	Chief Cook (D)	16,651	16,651
2	Cook/Baker (D)	16,228	32,456
1	Third Cook (D)	14,093	14,093
12	Steward Utilityman (D)	11,052	132,624
6	Messman (D)	11,052	66,312
1	Third Pantryman (D)	11,946	11,946
1	Laundryman (D)	11,654	11,654
1	Assistant Laundryman (D)	11,352	11,352
1	Purser	31,047	31,047
1	Nurse	21,112	21,112
1	Supply Officer	30,083	30,083
1	Assistant Supply Officer	23,517	23,517
25	Yeoman/Storekeeper	14,815	<u>370,375</u>
TOTAL BASE WAGE			\$3,052,708

NAVY CIVIL SERVICE MANNING
 NECC TAFS-1
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY 82\$)

	FYDP COST	ECONOMIC COST
Total Base Pay	\$3,052,708	\$3,052,708
Overtime (55% Base Pay - CIVMAN)	1,678,989	1,678,989
Premium/Penalty Pay (7% Base Pay - CIVMAN)	213,690	213,690
Subsistence (\$5.50/Man/Day)	367,373	367,373
Other Relief Officers, (6% Base Pay TAE-26 CIVMAN) Awaiting Assignment Training, Damage Control Instruction	183,162	183,162
Retirement ¹	213,690	622,752
Life & Health Insurance (3.7% of Base Pay)*	112,950	112,950
Workman's Compensation Bonuses and Awards, & Unemployment Programs (1.9% of Base Pay)*	58,001	58,001
Shore Leave (10.5% of Base Pay)	320,534	320,534
Annual, Sick and Military Leave (20% Base Pay - CIVMAN/CIV 77)	610,542	610,542
Travel (2% Base Pay - AF 58 CIVMAN)	61,054	61,054
SUBTOTAL	6,872,693	7,281,755
MSC OVERHEAD (5% SUBTOTAL)	343,635	364,088
TOTAL	\$7,216,328	\$7,645,843

1/ 7.0% Base Pay in FYDP Cost, 20.4% Base Pay in Economic Cost
 per OMB Circular A-76.

* Based on OMB Circular A-76.

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAE-26
 ANNUAL BASE WAGE COMPUTATIONS
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Master (D)	\$57,500	\$57,500
2	1st Officer (D)	37,986	75,972
1	2nd Officer (W)	26,791	26,791
2	3rd Officer (W)	23,904	47,808
2	Bosun (D)	18,823	37,646
1	Carpenter (D)	16,991	16,991
5	Bosun Mate (D)	15,450	77,250
9	Able Seaman (W)	12,961	116,649
24	Able Seaman Maintenance (D)	14,480	347,520
3	Ordinary Seaman (D)	12,038	36,114
1	Chief Engineer	57,500	57,500
1	1st Assistant Engineer	37,986	37,986
2	2nd Assistant Engineer	34,292	68,584
3	3rd Assistant Engineer	30,598	91,794
1	Chief Electrician	20,761	20,761
2	Refrigeration Engineer	18,732	37,464
3	Deck Engineer - Machinist	16,794	50,382
4	Unlicensed Jr. Engineer	16,389	65,556
4	2nd Electrician	18,732	74,928
3	Engine Utilityman	14,965	44,895
3	Oiler	12,961	38,883
3	F/WT	12,961	38,883
4	Wiper	12,038	48,152

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAE-26
 ANNUAL BASE WAGE COMPUTATIONS (CONT)
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Chief Steward	\$18,823	\$18,823
1	3rd Steward	13,100	13,100
1	Chief Cook	15,137	15,137
1	Cook/Baker	14,753	14,753
2	2nd Cook/Baker	14,753	29,506
2	2nd Cook	13,403	26,806
2	3rd Pantryman	10,862	21,724
2	Laundryman	10,596	21,192
7	Messman	10,048	70,336
12	Utilityman	10,048	120,576
1	Purser	31,047	31,047
1	Junior Purser	24,400	24,400
1	Supply Officer	30,083	30,083
2	Yeoman/Storekeeper	14,815	29,630
1	Nurse	21,112	<u>21,112</u>
TOTAL BASE WAGE			\$2,004,234

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAE-26
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY 82\$)

	<u>FYDP COST</u>	<u>ECONOMIC COST</u>
Total Base Pay	\$2,004,234	\$2,004,234
Overtime (37% Base Pay - CIVMAN)	741,567	741,567
Premium/Penalty Pay (7% Base Pay - CIVMAN)	140,296	140,296
Subsistence (\$5.50/Man/Day)	242,908	242,908
Other Relief Officers, (6% Base Pay - CIVMAN) Awaiting Assignment Training, Damage Control Instruction	120,254	120,254
Retirement ¹	140,296	408,864
Life & Health Insurance (3.7% of Base Pay)*	74,157	74,157
Workman's Compensation Bonuses and Awards, & Unemployment Programs (1.9% of Base Pay)*	38,080	38,080
Shore Leave (10.5% of Base Pay)	210,445	210,445
Annual, Sick and (20% of Base Pay - CIVMAN/CIV 77) Military Leave	400,847	400,847
Travel (2% Base Pay - AF-58 (CIVMAN))	40,085	40,085
Ammunition Bonus (10% Base Pay)	<u>200,423</u>	<u>200,423</u>
SUBTOTAL	4,353,592	4,622,160
MSC OVERHEAD (5% Subtotal)	<u>217,680</u>	<u>231,108</u>
TOTAL	4,571,272	4,853,268

1/ 7.0% Base Pay in FYDP Cost; 20.4% Base Pay in Economic Cost per OMB
 Circular A-76.

* Based on OMB Circular A-76.

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAFS-1
 ANNUAL BASE WAGE COMPUTATIONS
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Master	\$57,500	\$57,500
2	1st Officer	41,782	83,564
1	2nd Officer	29,470	29,470
2	3rd Officer	26,295	52,590
2	Bosun	20,703	41,406
2	Carpenter	18,688	37,376
6	Bosun Mate	16,994	101,964
6	Able Seaman	14,257	85,542
30	Able Seaman Maintenance	15,925	477,750
3	Ordinary Seaman	13,242	39,726
1	Chief Engineer	57,500	57,500
1	1st Assistant Engineer	41,782	41,782
1	2nd Assistant Engineer	37,719	37,719
2	3rd Assistant Engineer	26,295	52,590
1	3rd Assistant Engineer	33,657	33,657
2	Deck Engineer	20,608	41,216
3	Unlicensed Jr. Engineer	16,228	48,684
1	Electrician	22,838	22,838
3	Refrigeration Engineer	17,721	53,163
1	Machinist	18,473	18,473
1	Yeoman Storekeeper	16,297	16,297
2	2nd Electrician	20,608	41,216
3	Engine Utilityman	16,462	49,386

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAFS-1
 ANNUAL BASE WAGE COMPUTATIONS (CONT)
 (FY 82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
3	Oiler	\$14,257	\$42,771
3	Refrigeration Oiler	14,257	42,771
3	F/WT	14,257	42,771
3	Wiper	13,242	39,726
1	Nurse	21,112	21,112
1	Chief Steward	20,703	20,703
1	3rd Steward	14,410	14,410
1	Chief Cook	16,651	16,651
2	Cook/Baker	16,228	32,456
1	3rd Cook	14,093	14,093
6	Messman	11,052	66,312
12	Utilityman	11,052	132,624
1	3rd Pantryman	11,946	11,946
1	Laundryman	11,654	11,654
1	Assistant Laundryman	11,352	11,352
1	Purser	31,047	31,047
1	Fleet Issue Officer	30,083	30,083
1	Assistant Fleet Issue Officer	23,517	23,517
5	Yeoman Storekeeper	14,815	74,075
TOTAL BASE WAGE			\$2,201,483

NAVY CIVIL SERVICE MANNING
 PROPOSED MSC CREW-TAFS-1
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY 82\$)

	<u>FYDP COST</u>	<u>ECONOMIC COST</u>
Total Base Pay	\$2,201,483	2,201,483
Overtime (55% of Base Pay - CIVMAN)	1,210,816	1,210,816
Premium/Penalty Pay (7% Base Pay - CIVMAN)	154,104	154,104
Subsistence (\$5.50/Man/Day)	250,938	250,938
Other Relief Officers, (6% Base Pay AE-26 - CIVMAN)		
Awaiting Assignment	132,089	132,089
Training, Damage Control Instruction		
Retirement ¹	154,104	449,103
Life & Health Insurance (3.7% Base Pay)*	81,455	81,455
Workman's Compensation Bonuses and Awards, & Unemployment Programs (1.9% Base Pay)*	41,828	41,828
Shore Leave (10.5% Base Pay)	231,156	231,156
Annual, Sick and (20% Base Pay - CIVMAN/CIV 77) Military Leave	440,297	440,297
Travel (2% Base Pay - AF-58 (CIVMAN))	<u>44,030</u>	<u>44,030</u>
SUBTOTAL	4,942,300	5,237,299
MSC OVERHEAD (5% Subtotal)	<u>247,115</u>	<u>261,865</u>
TOTAL	\$5,189,415	\$5,499,164

1/ 7.0% Base Pay in FYDP Cost; 20.4% Base Pay in Economic Cost per OMB Circular A-76.

* Based on OMB Circular A-76.

NAVY CIVIL SERVICE MANNING
 NECC TAD-37
 ANNUAL BASE WAGE COMPUTATIONS
 (FY 82 \$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Master (D)	57,500	57,500
1	1st Officer (D)	42,026	42,026
1	2nd Officer (W)	28,609	28,609
2	3rd Officer (W)	24,386	48,772
1	Boatswain (D)	18,823	18,823
1	Carpenter (D)	16,991	16,991
1	Boatswain's Mate (D)	15,450	15,450
6	Able Seaman (W)	12,961	77,766
13	Able Seaman (D)	14,480	188,240
3	Ordinary Seaman (D)	12,038	36,114
1	Yeoman Storekeeper	14,815	14,815
1	Chief Engineer	57,500	57,500
1	1st Assistant Engineer (D)	42,026	42,026
1	2nd Assistant Engineer (D)	36,620	36,620
1	3rd Assistant Engineer (D)	31,215	31,215
3	3rd Assistant Engineer (W)	24,386	73,158
1	Electrician (D)	20,761	20,761
3	2nd Electrician (D)	18,732	56,196
2	Junior Engineer (D)	16,389	32,778
1	Refrigeration Engineer (D)	18,732	18,732
1	Plumber/Machinist (D)	17,177	17,177
3	Oiler (W)	12,961	38,883
3	Oiler (Evaporators) (W)	12,961	38,88
3	P/WT (W)	12,961	38,883
3	Wiper (D)	12,038	36,114
6	Utilityman (D)	14,965	89,790

NAVY CIVIL SERVICE MANNING
 NECC TAD-37
 ANNUAL BASE WAGE COMPUTATIONS (CONT)
 (FY82\$)

		<u>BASE WAGE</u>	<u>TOTAL</u>
1	Chief Steward	18,823	18,823
1	2nd Steward	13,100	13,100
3	3rd Steward	13,100	39,300
1	Chief Cook	15,137	15,137
4	Cook/Baker	14,753	59,012
4	2nd Cook	13,403	53,612
6	3rd Cook	12,812	76,872
22	Messman	10,048	221,056
50	Utilityman	10,048	502,400
1	Laundryman	10,596	10,596
1	Laundryman	10,596	10,596
4	Assistant Laundryman	10,322	41,288
1	Yeoman Storekeeper	14,815	14,815
1	Purser	31,047	31,047
1	Junior Purser	24,400	24,400
TOTAL BASE WAGE		<hr/>	<hr/> 2,305,816

NAVY CIVIL SERVICE MANNING
 NECC OPERATING CREW-TAD-37
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 FY 82 \$

	FYDP COST	ECONOMIC COST
Total Base Pay	\$2,305,876	\$2,305,876
Overtime (46% Base Pay - CIVMAN)	1,060,703	1,060,703
Premium/Penalty Pay (7% Base Pay - CIVMAN)	161,411	161,411
Subsistence (\$5.50/Man/Day)	331,238	331,238
Other Relief Officers, (6% Base Pay - CIVMAN) Awaiting Assignment, Training, Damage Control Instruction	138,353	138,353
Retirement ^{1/}	161,411	470,399
Life & Health Insurance (3.7% Base Pay)*	85,317	85,317
Workman's Compensation, Bonuses and Awards, & Unemployment Comp. (1.9% Base Pay)*	43,812	43,812
Shore Leave (10.5% Base Pay)	242,117	242,117
Annual, Sick & Military Leave (20% Base Pay - CIVMAN/CIV77)	461,175	461,175
Travel (2% Base Pay - CIVMAN)	46,118	46,118
SUBTOTAL	5,037,531	5,346,519
MSC OVERHEAD (5% SUBTOTAL)	251,877	267,326
TOTAL	\$5,289,408	\$5,613,845

^{1/} 7% Base Pay in FYDP Cost; 20.4% Base Pay in Economic Cost per
 OMB Circular A-76.

* Based on OMB Circular A-76.

APPENDIX J
NAVY CIVIL SERVICE
OPERATING AND SUPPORT COST ESTIMATES
PREPARED BY MSC

DEPARTMENT OF THE NAVY
COMMANDER MILITARY SEALIFT COMMAND
WASHINGTON D C 20390

REFER TO
M-4EX
4700
Ser: 2000

MAY 17 1982

Information Spectrum, Inc.
1745 Jefferson Davis Highway
Arlington, Virginia 22202

Attention: Mr. Richard Osseck

Gentlemen:

The information requested during your meeting with Mr. Robert Jacobs on April 26, 1982 is forwarded for your consideration. Data covering the AFS-1 and AD-37 was developed primarily from studies performed in late 1976. The AE-26 data is based upon the same study, plus the cost and experience gained during the recently completed yard modification to civilian manning on the USNS KILAUEA (T-AE-26).

Because these data were generated primarily from the 1976 study and without the benefit of shipcheck, a caution must be noted. A high confidence level is placed upon the data if the assumed conditions were, in fact, the actual conditions existing on board the ships. It is emphasized that MSC has not visited the ships in question and has assumed a "typical" material condition and arrangement problems reflected by recent civilian manning of fleet ships experience.

Further, the 1976 study concluded that civilian manning of the AD-37 was impracticable due to crew size and limited space. The cost of making the space available also contributed to the impracticable assessment. (The validity of that evaluation is upheld by the current reassessment of the AD-37 CIVMOD.)

The data provided is considered of "study quality", however, if refined budget estimates are required, MSC will have to visit the ships and perform in-depth study of material conditions and solutions to CIVMOD problems.

Thomas W. Allen

T. W. ALLEN
Engineering Officer

Enclosures (3)

AE-26 Class

Assumptions

1. Material conditions good to excellent as found on the KILAUEA
2. Material upgrade of UNREP equipment costs are not part of the study, but costs to be incurred under either operational scenario.
3. The additional 7,000 sq. ft. of space in the deck house can be added without extraordinary measures.

Manning Scale Increase

Due to the size of the proposed crew quarters and support of an additional 38 people, an increased deck house must be provided. An estimated 7,000 sq. ft. (gross) addition to the deck house over and above the KILAUEA modifications.

One-Time Costs

\$4,500,000	-	Repair, overhaul, dry dock, regulatory inspection and maintenance
\$18,500,000	-	Habitability modifications, support systems, and other changes required for civilian manning (includes estimated \$2,500,000 addition to support increase manning).

Recurring Costs

Fuel Consumption data is presented rather than costs so that the exact scenario may be calculated

452	BBLS/Day	Underway
325	BBLS/Day	Underway Replenishing
100	BBLS/Day	In Port

Maintenance/Repair costs are budgeted on a yearly basis. Costs are normally presented as an overhaul/non-overhaul year which would be:

\$5,542,000 per year with an overhaul, or
\$4,675,000 per year without an overhaul.

The Following Average Costs Apply:

Overhaul	\$1,950,000
Mid-Period Repairs	1,200,000
Voyage Repairs	1,940,000
Alterations	830,000
Extraordinary Repairs	678,000
Accident/Damage	35,000

AFS-1 Class

Assumptions

1. Material conditions good to excellent as found on the KILAUEA
2. Material upgrade of UNREP equipment costs are not part of the study, but costs to be incurred under either operational scenario.
3. The additional 3,000 sq. ft. of space in the deck house can be added without extraordinary measures.

Manning Scale Increase

Due to the size of the proposed crew quarters and support of an additional 10 people, an increased deck house must be provided. An estimated 3,000 sq. ft. (gross) addition to the deck house over and above the KILAUEA modifications.

One-Time Costs

\$4,500,000	-	Repair, overhaul, drydock, regulatory inspection and maintenance
\$19,750,000	-	Habitability modifications, support systems, and other changes required for civilian manning (includes estimated \$1,000,000 addition to support increase manning).

Recurring Costs

Fuel Consumption data is presented rather than costs so that the exact scenario may be calculated.

374	BBLS/Day	Underway
291	BBLS/Day	Underway Replenishing
90	BBLS/Day	In Port

Maintenance/Repair costs are budgeted on a yearly basis. Costs are normally presented as an overhaul/non-overhaul year which would be:

\$5,542,000 per year with an overhaul, or
\$4,675,000 per year without an overhaul.

The Following Average Costs Apply:

Overhaul	\$1,950,000
Mid-Period Repairs	1,200,000
Voyage Repairs	1,940,000
Alterations	830,000
Extraordinary Repairs	678,000
Accident/Damage	35,000

Assumptions

1. Material conditions good to excellent as found on the KILAUEA
2. Material upgrade of UNREP equipment costs are not part of the study, but costs to be incurred under either operational scenario.
3. Satisfactory store material handling arrangements, and messing can be arranged for both civil service mariners and either military or civilian repair crews.
4. Costs will be greatly increased due to the significant difficulty in getting to some work areas, the extensive "unmodified" areas which must be preserved and protected.
5. Material condition of this ship is anticipated to require more work than KILAUEA
6. All repair crew, if housed aboard, will go in unmodified Navy berthing compartments.

One-Time Costs

\$6,000,000 Overhaul	-	Repair, overhaul, drydock, regulatory inspection and maintenance
\$26,000,000 CIVMOD	-	Habitability modifications, support systems, and other changes required for civilian manning.

Recurring Costs

No data for fuel usage available.

Maintenance/Repair costs are budgeted on a yearly basis. Costs are normally presented as an overhaul, non-overhaul year which would be:

\$6,650,000 per year with an overhaul, or
\$4,980,000 per year without an overhaul.

The Following Average Costs Apply:

Overhaul	\$2,400,000
Mid-Period Repairs	1,430,000
Voyage Repairs	2,100,000
Alterations	1,000,000
Extraordinary Repairs	500,000
Accident/Damage	35,000

Enclosure (3)

AD-37 Class (cont.)

Caution

The AD-37 was not favorably reported for CIVMOD in the 1976 study and limited file data is available to fall back upon. As a result there is considerably less confidence in the data presented than for the other ships. It was assumed, on the basis of data available, that it would make no difference in the cost to modify the ship for either military or civilian repair crew. This assumption is probably unrealistic, but the way presented to MSC makes the assumption necessary and rational.

Enclosure (3) cont.

APPENDIX K
COMMERCIAL CONTRACT
MANPOWER COST CALCULATIONS

COMMERCIAL CONTRACT MANNING
 NECC TAE-26
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY 82 \$)

DIRECT LABOR COSTS

Base Pay	\$2,669,907
Non-Watch Pay	74,839
Overtime (37% Base Pay)	987,866
Indoctrination & Training	
Training Lundberg	434,966
Employment Commission	83,280
Special Account/Trans Inst	31,572
Automation Differential	
Travel (2% Base Pay -AF-58(CIVMAN))	53,398
Ammunition Bonus (10% Base Pay)	266,991
Pringe Benefits	
Retirement	917,086
Life and Health Insurance	66,218
Annual Leave	1,447,075
Social Security Payroll Tax (6.7% base pay)	178,884
Feinberg	231,323
P&I Insurance	<u>1,334,141</u>
SUBTOTAL	\$8,777,546
4% MSC Overhead	<u>351,102</u>
Total Civilian Manpower Cost	\$9,128,648

COMMERCIAL CONTRACT MANNING
NECC TAE-26
WAGE SCALE COST/MONTH (FY82\$)
A-2/Steam Single Shaft/Unautomated

	BASE WAGE	NON-WAGE	VAC/ WATCH	SUP PD	PENSION	WELF/ MED	FEINBERG	TRAIN LUND	AUTO- MATION COMM	SPDC COMM	SUPP. TRANSPORT	PENS.	TOTAL
1 Master	(16)	5007.29	1602.14	6651.06	1838.73	374.70	1712.15	84.00	0.0	16.50	16.20	0.0	17,122.77
2 First Officer	(17)	5128.24	1635.94	6339.37	1903.61	749.40	2033.80	168.00	0.0	13.00	32.40	0.0	17,841.76
1 Second Officer (W)	(18)	2314.85	0.0	280.50	859.28	374.70	945.97	84.00	0.0	16.50	16.20	0.0	7,481.10
2 Third Officer (W)	(21)	4131.10	0.0	5122.86	1533.47	749.40	1750.05	168.00	0.0	33.00	32.40	0.0	13,520.28
2 Boatswain	(783)	3582.46	0.0	0.0	913.00	750.00	0.0	0.0	463.20	0.0	82.00	30.00	0.0
1 Carpenter	(788)	1457.59	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	5,845.64
6 Bosun's Mate	(786)	9305.62	0.0	2799.00	2250.00	0.0	0.0	1389.60	0.0	261.00	90.00	0.0	2,589.19
9 AB (W)	(789)	10,955.53	0.0	4198.50	3375.00	0.0	0.0	2084.40	0.0	139.50	135.00	0.0	21,039.93
20 AB (D)	(789)	36185.09	0.0	13995.00	11250.00	0.0	0.0	6948.00	0.0	1305.00	450.00	0.0	70,133.09
45 OS	(791)	42627.34	0.0	20992.50	16875.00	0.0	0.0	10422.00	0.0	1951.50	675.00	0.0	97,349.34
1 Chief Engineer	(233)	48035.57	1233.06	5946.59	2311.00	330.00	2024.59	60.00	0.0	18.78	28.20	0.0	16,355.74
1 First Asst. Eng. (D)	(234)	2756.43	771.86	2826.13	1446.59	330.00	1861.93	60.00	0.0	18.78	28.20	0.0	10,129.90
2 Second Asst. Eng. (D)	(235)	4976.92	1393.60	5156.94	2611.92	660.00	2508.24	120.00	0.0	37.26	56.40	0.0	17,521.58
2 Third Asst. Eng. (D)	(236)	4976.92	0.0	5156.94	2611.92	660.00	2508.24	120.00	0.0	37.26	56.40	0.0	16,127.98
3 Third Asst. Eng. (W)	(238)	6661.41	0.0	6902.33	2495.93	990.00	3438.92	180.00	0.0	37.56	84.60	0.0	21,809.53
1 Chief Electrician (D)	(800)	1863.77	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,995.37
4 Second Electrician (D)	(801)	6569.06	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	0.0	11,495.48
1 Refrig. Engineer (D)	(812)	1787.09	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,918.69
2 Second Refrig. Eng. (D)	(803)	3176.08	0.0	913.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5439.78
4 Deck Engineers	(804)	5912.92	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	0.0	10,439.32
2 Mechanic/Plumber	(802)	2195.12	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5,458.32
3 Oilier (W)	(805)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7,013.31
3 FWT (W)	(807)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7,013.31
3 Wiper (W)	(816)	3361.23	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	6,756.31
4 Utilitymen	(815)	5569.04	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	0.0	10,095.44
1 Chief Steward	(823)	1586.27	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,715.87
1 Chief Cook	(826)	1408.14	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,539.74
1 Cook/Baker	(829)	1372.54	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,504.14
3 Cooks	(828)	3549.61	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	6,964.41
6 Messmen	(830)	5612.88	0.0	2279.00	1500.00	0.0	0.0	1389.60	0.0	261.00	90.00	0.0	12,402.48
12 Utilitymen	(830)	11225.16	0.0	5598.00	4500.00	0.0	0.0	2779.20	0.0	522.00	180.00	0.0	26,804.96
1 Pantryman	(830)	935.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,067.08
2 Laundrymen	(830)	1870.96	0.0	913.00	750.00	0.0	0.0	461.20	0.0	87.00	30.00	0.0	4,134.16
1 Purser	(688)	1540.84	0.0	1167.33	285.00	150.00	266.51	0.0	0.0	30.00	0.0	97.20	3,516.88
1 Nurse	(681)	1979.58	0.0	1491.46	285.00	150.00	246.52	0.0	0.0	30.00	0.0	124.20	4,306.76
1 Supply Officer	(816)	1925.56	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	3,057.16
1 Asst. Supply Officer	(781)	1506.25	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2,637.85
3 Yeomen/Storekeepers	(781)	451R.75	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7,913.55
TOTAL		222,492.26	6216.58	120,389.61	76,202.45	5,518.02	19,276.92	36,247.02	0	6940.02	2631.00	221.40	496,355.64
Cost/Year		2,669,907.01	74038.96	1,477,075.30	914429.40	66218.40	231323.04	434,966.40	0	81280.24	3,1272.00	2,656.80	5,956,267.70

COMMERCIAL CONTRACT MANNING
 NECC TAFS-1
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY 82 \$)

DIRECT LABOR COSTS

Base Pay	\$2,948,207
Non-Watch Pay	89,761
Overtime (55% Base Pay)	1,621,514
Indoctrination & Training	
Training/Lundberg	473,875
Employment Commission	90,582
Special Account/Trans Inst	34,092
Automation Differential	56,047
Travel (2% Base Pay AF-58 CIVMAN)	58,964
Fringe Benefits	
Retirement	998,732
Life and Health Insurance	66,218
Annual Lease	1,574,543
Social Security Payroll Tax (6.7% base pay)	197,530
Feinberg	239,617
P&I Insurance	<u>1,276,143</u>
SUBTOTAL	\$9,725,825
4% MSC Overhead	389,033
Total Civilian Manpower Cost	\$10,114,858

COMMERCIAL CONTRACT MANNING
NECC TAFS-1
WAGE SCALE COST/MONTH (FY82S)
A-2/Steam Single Shaft/Automated

		BASE WAGE	NON- WATCH	VACA/ SUP FD	PENSION	WELF/ MED	FEINBERG	TRAIN/ LIRD	AUTO- MATION	ENPL. COMM.	SPEC./ ACCT/	SUPP.	SPEC./ INST. PENS.	TOTAL
1 Master (D)	(16)	5007.29	1402.14	7316.16	2044.61	374.70	1854.64	84.00	640.94	16.30	16.20	---	18751.18	
2 1st Officer (D)	(17)	5128.24	1435.94	6995.30	2091.97	749.40	2179.73	168.00	656.42	33.00	32.40	---	19472.40	
1 2nd Officer (W)	(18)	2314.85	0.0	3157.66	945.21	314.70	1011.84	84.00	296.30	16.50	16.20	---	8217.26	
2 3rd Officer (W)	(21)	4131.10	0.0	5635.14	749.40	1867.61	168.00	413.11	33.00	32.40	---	14716.58		
2 Boatswain (D)	(25)	3582.44	0.0	933.00	1686.82	0.0	0.0	463.20	0.0	87.50	30.00	---	585.64	
1 Carpenter (D)	(28)	1451.59	0.0	466.50	750.00	0.0	0.0	231.60	0.0	41.50	15.00	---	2589.19	
6 Boatswain's Mate (D)	(286)	9505.62	0.0	2799.00	375.00	0.0	0.0	1389.60	0.0	461.00	90.00	---	16295.22	
28 AB (D)	(289)	33772.76	0.0	13062.00	2250.00	0.0	0.0	6486.80	0.0	1218.00	420.00	---	65437.56	
41 Ordinary Seaman (W)	(191)	38656.02	0.0	19126.50	10500.00	0.0	0.0	9495.60	0.0	1783.00	615.00	---	85031.12	
9 AB (W)	(289)	11436.05	0.0	4198.50	15315.00	0.0	0.0	2084.40	0.0	391.50	135.00	---	21618.45	
1 Chief Engineer (D)	(253)	4403.52	1233.52	6341.24	2562.10	310.00	2201.75	60.00	563.66	18.78	28.20	---	17922.31	
1 1st Asst. Eng. (D)	(254)	2756.63	771.84	3141.74	1591.25	310.00	1472.83	60.00	352.83	18.78	28.20	---	10223.91	
2 2nd Asst. Eng. (D)	(255)	4976.92	1391.60	5672.62	2813.10	660.00	2708.48	120.00	637.06	37.56	56.40	---	19135.74	
2 3rd Asst. Eng. (D)	(257)	4460.94	1243.50	5061.70	4433.68	660.00	2471.27	120.00	444.08	37.56	56.40	---	17099.14	
3 3rd Asst. Eng. (D)	(258)	6661.41	0.0	7592.55	990.00	1805.52	900.00	3706.91	180.00	666.14	84.60	---	23783.67	
4 Deck Engineer (D)	(603)	5912.92	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	---	10849.32	
1 Electrician (D)	(800)	1861.77	0.0	466.50	375.00	0.0	0.0	231.60	0.0	63.00	15.00	---	2995.37	
2 2nd Electrician (D)	(801)	3484.54	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	---	5747.24	
3 Refrig. Eng. (W)	(808)	5226.81	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	8621.61	
3 Refrig. Oilier (W)	(805)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	7013.31	
1 Machinist (D)	(812)	13922.26	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2523.86	
3 Machineryman (W)	(612)	4176.76	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	7571.58	
3 Oilier (W)	(805)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	7013.31	
3 F/WT (W)	(807)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	7013.31	
3 Wiper (W)	(816)	3961.23	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	---	6756.03	
1 Chief Steward (D)	(823)	1584.27	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2715.87	
1 Chief Cook (D)	(826)	1408.14	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2539.74	
2 Cook/Baker (D)	(829)	2745.06	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	---	5008.28	
1 3rd Cook (D)	(828)	1189.87	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2321.47	
12 Steward Utilitymen (D)	(830)	11225.76	0.0	5598.00	4500.00	0.0	0.0	2779.20	0.0	522.00	180.00	---	24804.96	
6 Messman (D)	(830)	5612.88	0.0	2799.00	2250.00	0.0	0.0	1389.60	0.0	261.00	90.00	---	12402.48	
1 3rd Pantryman (D)	(830)	935.43	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2167.08	
1 Laundryman (D)	(830)	915.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2067.08	
1 Asst. Laundryman (D)	(830)	915.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2067.08	
1 Purser (D)	(658)	1540.84	---	1167.33	285.00	150.00	246.51	---	---	30.00	---	97.20	3516.88	
1 Surge (D)	(661)	1979.58	0.0	1481.46	285.00	150.00	246.51	---	---	30.00	---	124.20	4306.75	
1 Supply Officer (D)	(816)	1925.56	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	3057.16	
1 Asst. Supply Officer (D)	(837)	1506.25	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	---	2631.85	
25 Yeoman/Storekeeper (D) (RM)	(781)	97636.23	0.0	11682.49	9375.00	0.0	0.0	5789.99	0.0	1087.50	375.00	---	65946.23	
TOTAL		245683.94	7480.08	131211.90	83006.26	5518.20	19968.08	39489.59	4670.55	7548.52	2841.00	221.40	567639.52	
Cost/Year		2988207.30	89760.96	1574542.80	996075.12	66218.04	239616.96	473875.08	56046.06	90382.24	36092.00	2656.00	6571674.20	

COMMERCIAL CONTRACT MANNING
 PROPOSED MSC CREW-TAE-26
 ANNUAL FYDP AND ECONOMIC MANPOWER COST TO
 DOD AND U.S. GOVT.
 (FY82\$)

DIRECT LABOR COSTS

Base Pay	\$2,067,892
Non-Watch Pay	82,617
Overtime (37% Base Pay)	765,120
Indoctrination & Training	
Training/Lundberg	281,226
Employment Commission	58,656
Special Account/Trans Inst	22,435
Ammunition Bonus (10% Base Pay)	206,789
Travel (2% Base Pay AF-58(CIVMAN))	41,358
Fringe Benefits	
Retirement	679,153
Life and Health Insurance	60,098
Annual Lease	1,139,984
Social Security Payroll Tax (6.7% base pay)	138,549
Feinberg	204,182
P&I Insurance	<u>955,213</u>
SUBTOTAL	\$6,703,272
4% MSC Overhead	268,131
Total Civilian Crew Cost	\$6,971,403

**COMMERCIAL CONTRACT MANNING
PROPOSED MSC CREW-TAB-26
WAGE SCALE COST/MONTH (FY82\$)
A-2/Steam Single Shaft/Unautomated**

		BASE WAGE	NON- WATCH	VACA/ SUP FD	PENSION	WELF/ MED	FEINBERG	TRAIN/ LUND	AUTO- MATION	EMPL COMM	SPEC ACCT/	SUPP PENS	TOTAL
1 Master	(16)	5007.29	1402.14	6651.06	1858.73	374.70	1712.13	87.00	0.0	16.50	16.20	0.0	17122.77
2 First Officer (D)	(17)	5128.24	1435.94	6359.37	1901.61	749.40	2033.80	168.00	0.0	33.00	32.40	0.0	17843.76
1 Second Officer (W)	(18)	2314.85	648.20	2870.60	859.28	374.70	945.97	86.00	0.0	16.50	16.20	0.0	8130.30
2 Third Officer (W)	(19)	4131.10	0.0	5122.86	1533.47	749.40	1750.05	168.00	0.0	33.00	32.40	0.0	13520.28
2 Rouin (D)	(785)	3582.44	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5855.64
1 Carpenter (D)	(786)	1457.59	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2589.19
5 Bosun's Mate (D)	(786)	7921.35	0.0	2332.50	1875.00	0.0	0.0	1158.00	0.0	217.50	75.00	0.0	13579.35
9 Able Seaman (W)	(789)	10855.53	0.0	4198.50	3375.00	0.0	0.0	277.92	0.0	391.50	135.00	0.0	19233.45
24 Able Seaman (Maint.)	(789)	28948.07	0.0	11196.00	9000.00	0.0	0.0	558.40	0.0	1044.00	360.00	0.0	56106.47
3 Ordinary Seaman	(791)	2828.49	0.0	1399.50	1125.00	0.0	0.0	696.80	0.0	130.50	45.00	0.0	6223.29
1 Chief Engineer (D)	(253)	4403.52	1233.06	5946.59	2311.00	330.00	2024.59	60.00	0.0	18.78	28.20	0.0	16355.74
1 First Asst. Eng. (D)	(254)	2756.43	771.84	2856.13	1446.59	330.00	1861.93	60.00	0.0	18.78	28.20	0.0	10129.90
2 Second Asst. Eng. (D)	(255)	4976.92	1393.60	5156.94	2611.92	660.00	2508.24	120.00	0.0	37.56	56.40	0.0	17521.58
3 Third Asst. Eng. (W)	(258)	6661.41	0.0	6902.33	3495.93	990.00	3438.92	180.00	0.0	56.34	84.60	0.0	21804.53
1 Chief Electrician (D)	(800)	1863.77	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2905.37
2 Refrig. Eng. (D)	(809)	3574.18	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5837.38
3 Deck Eng. Mechanist (D)	(803)	4434.69	0.0	1399.50	1125.00	0.0	0.0	696.80	0.0	130.50	45.00	0.0	7829.49
4 UNL Jr. Eng. (D)	(804)	6097.44	0.0	1866.00	1500.00	0.0	0.0	926.50	0.0	174.00	60.00	0.0	10623.84
4 Second Electrician (D)	(801)	6969.08	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	0.0	11495.48
3 Engine Utilityman	(815)	4176.78	0.0	1399.50	1125.00	0.0	0.0	696.80	0.0	130.50	45.00	0.0	7571.68
3 Oiler (W)	(805)	3618.51	0.0	1399.50	1125.00	0.0	0.0	696.80	0.0	130.50	45.00	0.0	7013.31
3 Fireman/Water Tender (W)	(807)	3618.51	0.0	1399.50	1125.00	0.0	0.0	696.80	0.0	130.50	45.00	0.0	7013.31
4 Wiper (D)	(816)	4481.64	0.0	1866.00	1500.00	0.0	0.0	926.40	0.0	174.00	60.00	0.0	9008.04
1 Chief Steward	(823)	1583.27	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2715.87
1 Third Steward	(769)	1405.39	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2536.99
1 Chief Cook	(826)	1408.14	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2539.74
1 Night Cook & Baker	(829)	1372.54	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	2506.16
2 Second Cook/Baker	(827)	2412.34	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	4615.54
2 Asst. Cook	(828)	2379.74	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	4642.94
2 Third Pastryman	(830)	1870.96	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	4134.16
2 Laundryman	(830)	1870.96	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	4134.16
7 Messman	(830)	6548.36	0.0	3265.50	2625.00	0.0	0.0	1621.20	0.0	306.50	105.00	0.0	14469.56
12 Utilityman	(830)	11225.76	0.0	5596.00	4500.00	0.0	0.0	2779.20	0.0	522.00	180.00	0.0	24804.96
1 Purser	(658)	1540.64	0.0	1167.33	285.00	150.00	246.51	0.0	0.0	30.00	0.0	97.20	3516.88
1 Jr. Purser	(661)	1979.58	0.0	1491.46	285.00	150.00	246.51	0.0	0.0	30.00	0.0	124.20	4306.75
1 Nurse	(661)	1979.58	0.0	1491.46	285.00	150.00	246.51	0.0	0.0	30.00	0.0	124.20	4306.75
1 Supply Officer	(836)	1925.56	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.50	15.00	0.0	3057.16
2 Yeoman/Storekeeper	(781)	3012.50	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5275.70
TOTAL		172324.35	6884.78	94898.63	56250.53	5008.20	17015.18	24335.52	0.0	4887.96	1869.50	345.60	383020.35
Annual Cost		206492.20	82617.36	134983.56	675006.36	60098.40	204182.16	281226.24	0.0	58655.52	22435.20	4167.20	4596246.20

COMMERCIAL CONTRACT MANNING
 PROPOSED MSC CREW TAFS-1
 ANNUAL FYDP AND ECONOMIC MANPOWER
 COST TO DOD AND U.S. GOVT.
 (FY82\$)

DIRECT LABOR COSTS

Base Pay	\$2,123,915
Non-Watch Pay	80,816
Overtime (55% Base Pay)	1,168,153
Indoctrination & Training	
Training/Lundberg	318,859
Employment Commission	61,202
Special Account/Trans Inst	23,177
Automation Differential	48,387
Travel (2% Base Pay AF-58 CIVMAN)	42,478
Fringe Benefits	
Retirement	703,229
Life and Health Insurance	54,338
Annual Lease	1,171,877
Social Security Payroll Tax (6.7% base pay)	142,302
Feinberg	193,707
P&I Insurance	<u>871,682</u>
SUBTOTAL	\$7,004,122
4% MSC Overhead	<u>280,165</u>
Total Civilian Manpower Cost	\$7,284,287

**COMMERCIAL CONTRACT MANNING
PROPOSED MSC CREW TAFF-1**

		BASE WAGE	NON- WATCH	SUP FH	PPNSN	WEL/F	FEINBERG	TRAIN/ LUND	AUTO- MATION	EMPL COM/TRANS	SPEC AL/INST	SUPP INST/PENS	TOTAL
1 Master	(16)	5007.29	1402.14	7316.16	2044.61	314.70	1854.64	84.00	640.94	16.50	16.20	0.0	18757.18
2 First Officer (D)	(17)	5128.24	1435.94	6995.30	2093.97	749.40	2179.40	160.00	656.42	33.00	32.40	0.0	19472.07
1 Second Officer (W)	(18)	2314.85	648.20	3177.66	945.21	314.70	1011.84	84.00	296.30	16.50	16.20	0.0	8865.46
2 Third Officer (W)	(21)	4131.10	0.0	5635.14	1686.82	749.40	1867.61	148.00	413.11	33.00	32.40	0.0	14716.58
2 Bosun (D)	(765)	3582.44	0.0	933.00	750.00	0.0	0.0	463.20	0.0	0.0	0.0	0.0	30.00
2 Carpenter (D)	(768)	2915.18	0.0	933.00	750.00	0.0	0.0	463.20	0.0	0.0	0.0	0.0	30.00
6 Bosun Mate (D)	(786)	9505.62	0.0	2799.00	2250.00	0.0	0.0	463.20	0.0	0.0	0.0	0.0	30.00
6 Able Seaman (W)	(789)	7227.02	0.0	2799.00	2250.00	0.0	0.0	1389.60	0.0	261.00	90.00	0.0	16295.22
30 Able Seaman (Maint.)	(789)	36105.10	0.0	1395.00	11250.00	0.0	0.0	694.00	0.0	1309.50	450.00	0.0	14026.62
3 Ordinary Seaman (D)	(791)	2828.49	0.0	1399.50	1125.00	0.0	0.0	694.00	0.0	1309.50	45.00	0.0	6222.29
1 Chief Engineer (W)	(253)	4403.52	1233.06	6541.24	2542.10	310.00	2201.75	60.00	563.66	18.78	28.20	0.0	17922.31
1 First Asst. Eng. (D)	(254)	2716.43	771.84	3111.75	1591.25	310.00	1472.83	60.00	352.83	18.78	28.20	0.0	10522.91
1 Second Asst. Eng. (W)	(255)	2488.46	—	2816.31	1436.55	310.00	1354.24	60.00	318.53	18.78	28.20	0.0	8871.07
2 Third Asst. Eng. (W)	(257)	4460.94	1243.50	5061.70	2563.68	660.00	2471.28	120.00	568.44	37.36	56.40	0.0	17222.50
1 Third Asst. Eng. (D)	(258)	2220.67	0.0	2530.85	1281.84	310.00	1235.64	60.00	222.05	18.78	28.20	0.0	7927.83
2 Deck Engineer (D)	(803)	2956.46	0.0	933.00	750.00	0.0	0.0	463.20	0.0	0.0	0.0	0.0	30.00
3 MTL. Jr. Engineer (W)	(804)	4573.09	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7967.88
1 Electrician (D)	(800)	1863.77	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2993.37
3 Refrig. Engineer (D)	(809)	5226.81	—	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	8621.61
1 Machinist (D)	(802)	1591.56	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2729.16
1 Yeoman/Storekeeper (D)	(781)	1506.25	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2637.85
2 Second Electrician (D)	(801)	3486.54	0.0	931.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5747.74
3 Engine Utilityman (D)	(812)	4176.78	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7571.58
3 Oilier (W)	(805)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7013.31
3 Refrig. Oilier (W)	(807)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7013.31
3 Firerman/Watertender (W)	(807)	3618.51	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	7013.31
3 Wiper (D)	(816)	3361.23	0.0	1399.50	1125.00	0.0	0.0	694.80	0.0	130.50	45.00	0.0	6756.03
1 Chief Steward	(822)	1584.27	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2715.87
1 Third Steward	(828)	1189.87	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2321.47
1 Chief Cook	(826)	1408.14	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2539.74
2 Cook/Baker	(829)	2145.08	0.0	933.00	750.00	0.0	0.0	463.20	0.0	87.00	30.00	0.0	5008.28
1 Third Cook	(828)	1189.87	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2321.47
6 Messmen	(820)	5612.88	0.0	2799.00	2250.00	0.0	0.0	1389.60	0.0	261.00	90.00	0.0	12402.48
12 Utilitymen	(820)	11229.76	0.0	5598.00	4500.00	0.0	0.0	2779.20	0.0	522.00	180.00	0.0	24804.06
1 Third Pantryman	(810)	935.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2067.06
1 Laundryman	(810)	935.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2067.06
1 Asst. Laundryman	(810)	935.48	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2067.06
1 Purser	(658)	1540.84	0.0	1167.33	285.00	150.00	246.51	0.0	0.0	30.00	0.0	0.0	97.20
1 Nurse	(661)	1979.58	0.0	1491.46	150.00	0.0	0.0	246.51	0.0	0.0	0.0	0.0	30.06
1 Supply Officer	(816)	1925.56	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	3057.16
1 Asst. Supply Officer	(837)	1506.25	0.0	466.50	375.00	0.0	0.0	231.60	0.0	43.30	15.00	0.0	2637.85
5 Yeoman Storekeepers	(781)	7531.25	0.0	232.50	1875.00	0.0	0.0	1158.00	0.0	217.50	75.00	0.0	13189.25
Cost/Month		176992.95	6734.68	97656.40	56381.03	4528.20	16442.25	26571.60	4032.28	5100.18	1931.40	221.40	394292.37
Annual Cost		2123915.40	8016.16	1471876.80	700572.36	54338.40	193707.00	318859.20	48387.36	61202.16	2376.80	2556.80	477908.44

COMMERCIAL CONTRACT MANNING
 NECC OPERATING CREW TAD-37
 ANNUAL FYDP AND ECONOMIC MANPOWER
 COST TO DOD AND U.S. GOVT.
 (FY 82 \$)

DIRECT LABOR COSTS

Base Pay	2,505,491
Nonwatch Pay	85,224
Overtime (46% Base Pay)	1,152,526
Indoctrination and Training	
Training/Lundberg	425,621
Employment Commission	81,516
Special Account/Trans Inst	30,838
Automation Differential	---
Travel (2% Base Pay - AF-58 CIVMAN)	50,110

FRINGE BENEFITS

Retirement	895,702
Life and Health Insurance	61,722
Annual Leave	1,403,413
Social Security Payroll Tax (6.7% Base Pay)	167,868
Feinberg	216,032

P&I INSURANCE

1,142,383

SUBTOTAL

8,218,396

4% MSC OVERHEAD

328,736

TOTAL

8,547,132

**COMMERCIAL CONTRACT MANNING
NECC OPERATING CREW TAD-37
WAGE SCALE COST/MONTH (FY82\$)**

		BASE WAGE	NON- WATCH	VACA/ SUP FD	PENSION	WELF/ MED	FEINBERG	TRAIN/ LUND	AUTO- MATION	ENPL. COMM.	SUPP. TRANS. INST.	SUPP. ACCT.	SPEC.	
1	Master (D)	(10)	5321.45	1490.12	7068.36	1975.35	374.70	1801.15	84.00	0	16.50	16.20	0.0	
1	1st Officer (D)	(11)	2837.98	794.41	3548.19	1033.11	374.70	1094.58	84.00	0	16.50	16.20	0.0	
1	2nd Officer (W)	(12)	2472.11	692.25	3065.63	917.66	374.70	990.73	84.00	0	16.50	16.20	0.0	
2	3rd Officer (W)	(13)	4214.24	0	5225.97	1564.34	749.40	1773.71	168.00	0	33.00	32.40	0.0	
1	Bosun (D)	(185)	1791.22	0	466.50	375.00	0	0	0	0	231.60	0	13761.06	
1	Carpenter (D)	(788)	1657.59	0	466.50	375.00	0	0	0	0	231.60	0	2922.82	
1	Bosun Mate (D)	(189)	1584.27	0	466.50	375.00	0	0	0	0	231.60	0	2589.19	
6	AB (W)	(189)	7237.02	0	2798.00	2250.00	0	0	0	0	1389.60	0	2715.87	
13	AB (D)	(789)	15680.21	0	6065.50	4875.50	0	0	0	0	3010.80	0	14026.62	
3	OS (D)	(791)	2828.49	0	1399.50	1125.00	0	0	0	0	694.80	0	30391.01	
1	Yeoman/Storekeeper (D)	(781)	1506.25	0	466.50	375.00	0	0	0	0	231.60	0	6221.29	
1	Chief Engineer (D)	(245)	4818.48	1349.24	6506.93	2528.56	330.00	2191.53	60.00	0	43.50	15.00	2637.85	
1	1st Asst. Engineer (D)	(246)	3049.86	853.99	3160.17	1600.58	330.00	1479.58	60.00	0	18.78	28.20	17831.72	
1	2nd Asst. Engineer (D)	(247)	2657.52	744.18	275.66	1394.70	330.00	1322.15	60.00	0	18.78	28.20	10381.56	
1	3rd Asst. Engineer (D)	(250)	2265.16	0	2347.11	1188.78	310.00	1164.30	60.00	0	18.78	28.20	9309.21	
3	3rd Asst. Engineer (W)	(250)	6795.45	0	704.33	3566.34	950.00	3492.89	180.00	0	56.34	84.60	7402.32	
1	Electrician (D)	(800)	1863.77	0	466.50	375.00	0	0	0	0	231.60	0	22206.95	
3	2nd Electrician (D)	(801)	5226.81	0	1399.50	1125.00	0	0	0	0	694.80	0	2995.37	
2	Jr. Engineer (D)	(251)	4206.34	1177.84	4356.50	2207.52	660.00	2198.24	120.00	0	130.50	45.00	8621.61	
1	Refrig. Engineer (D)	(809)	1187.09	0	466.50	375.00	0	0	0	0	120.00	0	15022.40	
1	Plumber/Mechanic (D)	(809)	1392.26	0	466.50	375.00	0	0	0	0	120.00	0	2918.49	
3	Oilier (W)	(805)	3618.51	0	1399.50	1125.00	0	0	0	0	231.60	0	2522.86	
3	Oilier/Evaporator (W)	(805)	3618.51	0	1399.50	1125.00	0	0	0	0	694.80	0	7013.31	
3	PWT (W)	(807)	3618.51	0	1399.50	1125.00	0	0	0	0	694.80	0	7013.31	
3	Wiper (D)	(816)	3361.23	0	1399.50	1125.00	0	0	0	0	694.80	0	7013.31	
6	Utilityman (D)	(815)	8353.56	0	466.50	375.00	0	0	0	0	1389.60	0	6756.03	
1	Chief Steward	(821)	1584.27	0	466.50	375.00	0	0	0	0	231.60	0	15141.16	
1	2nd Steward	(825)	1791.22	0	466.50	375.00	0	0	0	0	231.60	0	2715.87	
3	3rd Steward	(825)	5373.66	0	1399.50	1125.00	0	0	0	0	231.60	0	2922.82	
1	Chief Cook	(826)	1408.14	0	466.50	375.00	0	0	0	0	231.60	0	8768.40	
4	Cook/Baker	(829)	5490.16	0	1866.00	1500.00	0	0	0	0	926.40	0	2539.74	
4	2nd Cook	(827)	4824.66	0	1866.00	1500.00	0	0	0	0	174.00	0	10046.56	
6	3rd Cook	(828)	7139.22	0	2799.00	2250.00	0	0	0	0	1389.60	0	9351.08	
22	Messmen	(830)	20580.54	0	1026.00	825.00	0	0	0	0	5095.20	0	13928.82	
50	Utilitymen	(830)	46773.96	0	2325.00	1875.00	0	0	0	0	11580.00	0	45475.74	
1	Laundryman Foreman	(830)	9354.48	0	466.50	375.00	0	0	0	0	231.60	0	13333.96	
1	Laundryman	(830)	9354.48	0	466.50	375.00	0	0	0	0	43.50	15.00	2062.08	
8	Asst. Laundryman	(830)	3741.89	0	1866.00	1500.00	0	0	0	0	926.40	0	8268.29	
1	Yeoman Storekeeper	(781)	1506.25	0	466.50	375.00	0	0	0	0	231.60	0	2631.85	
1	Purser	(658)	1540.84	0	1167.33	285.00	150.00	246.51	0	0	30.00	0	3516.88	
1	Jr. Purser	(664)	1602.11	0	1229.41	285.00	150.00	246.51	0	0	30.00	0	1024.63	
TOTAL		208790.88	7102.03	116951.11	74441.96	5143.50	18002.68	35668.40	0	6791.02	2569.80	199.80	475463.18	
Cost/Year		x12	2505690.60	85224.36	1403411.30	893303.52	61722.00	2160312.16	425620.80		81516.24	30837.60	2397.60	570558.20

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